

LISTING
OF
PUBLICATIONS
FROM THE
EXPERIMENTAL LAKES AREA



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PEER-REVIEWED RESEARCH PAPERS

1. Allan, C.J. 1995. Hydrochemical response of upland Precambrian Shield catchments to additions of H₂SO₄ and NH₄NO₃ during snowmelt. *Can. J. Fish. Aquat. Sci.* **52**: 2213-2228.
2. Allan, C.J., A. Heyes, N.T. Roulet, V.L. St. Louis, and J.W.M. Rudd. 2001. Spatial and temporal dynamics of mercury and organic carbon in Precambrian Shield runoff. *Biogeochem.* **52**: 13-40.
3. Allan, C.J., and N.T. Roulet. 1994. Runoff generation in zero-order Precambrian Shield catchments: The stormflow response of a heterogeneous landscape. *Hydrolog. Proc.* **8**: 369-388.
4. Allan, C.J., and N.T. Roulet. 1994. Solid phase controls of dissolved aluminum within upland Precambrian Shield catchments. *Biogeochem.* **26**: 85-114.
5. Allan, C.J., N.T. Roulet, and A.R. Hill. 1993. The biogeochemistry of pristine, headwater Precambrian Shield watersheds: an analysis of material transport within a heterogeneous landscape. *Biogeochem.* **22**: 37-79.
6. Allis, R.G., and G.D. Garland. 1977. Geothermal measurements in five small lakes of northwest Ontario: reply. *Can. J. Earth Sci.* **14**: 334-335.
7. Amaral, J.A., R.H. Hesslein, J.W.M. Rudd, and D.E. Fox. 1989. Loss of total sulfur and changes in sulfur isotopic ratios due to drying of lacustrine sediments. *Limnol. Oceanogr.* **34**: 1351-1358.
8. Amyot, M.; G. Southworth, S.E. Lindberg, H. Hintelmann, J.D. Lalonde, N. Ogrinc, A.J. Poulain, and K.A. Sandilands. 2004. Formation and evasion of dissolved gaseous mercury in large enclosures amended with ²⁰⁰HgCl₂. *Atmos. Environ.* **28**: 4279-4289. [METAALICUS contribution]
9. Anderson, R.F., P.H. Santschi, U.P. Nyffeler, and S.L. Schiff. 1987. Validating the use of radiotracers as analogs of stable metal behavior in enclosed aquatic ecosystem experiments. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 251-259.
10. Anderson, R.F., and S.L. Schiff. 1987. Alkalinity generation and the fate of sulfur in lake sediments. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 188-193.
11. Anderson, R.F., S.L. Schiff, and R.H. Hesslein. 1987. Determining sediment accumulation and mixing rates using ²¹⁰Pb, ¹³⁷Cs, and other tracers: problems due to postdepositional mobility or coring artifacts. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 231-250.
12. Armstrong, F.A.J., and D.W. Schindler. 1971. Preliminary chemical characterization of waters in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 171-187.
13. Arnason, A.N., and K.H. Mills. 1981. Bias and loss of precision due to tag loss in Jolly-Seber estimates for mark-recapture experiments. *Can. J. Fish. Aquat. Sci.* **38**: 1077-1095.
14. Arnason, A.N., and K.H. Mills. 1987. Detection of handling mortality and its effects on Jolly-Seber estimates for mark-recapture experiments. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 64-73.
15. Arnott, S.E., B. Keller, P.J. Dillon, N. Yan, M. Paterson, and D. Findlay. 2003. Using temporal coherence to determine the response to climate change in Boreal Shield lakes. *Environ. Monit. Assess.* **88**: 365-388.

16. Babiarz, C.L., J.P. Hurley, D.P. Krabbenhoft, C.C. Gilmour, and B.A. Branfireun. 2003. Application of ultrafiltration and stable isotope amendments to the partitioning of mercury in lake water and over land runoff. *Sci. Tot. Environ.* **304**: 295-303. [METAALICUS contribution #5]
17. Baker, R.F., P.J. Blanchfield, M.J. Paterson, R.J. Flett, and L. Wesson. 2004. Evaluation of nonlethal methods for the analysis of mercury in fish tissue. *Trans. Am. Fish. Soc.* **133**: 568-576. [METAALICUS contribution # 12]
18. Barica, J., and F.A.J. Armstrong. 1971. Contribution by snow to the nutrient budget of some small northwest Ontario lakes. *Limnol. Oceanogr.* **16**: 891-899.
19. Barrie, L.A., and A. Sirois. 1986. Wet and dry deposition of sulphates and nitrates in eastern Canada. *Water Air Soil Pollut.* **30**: 303-310.
20. Baulch, H.M., T.W. Nord, M.Y. Ackerman, J.D. Dale, R.R.O. Hazewinkel, D.W. Schindler, and R.D. Vinebrooke. 2003. Climate warming experiments: Design of a mesocosm heating system. *Limnol. Oceanogr.: Methods* **1**: 10-15. Available online: <http://www.aslo.org/lomethods/free/2003/0010.pdf>
21. Baulch, H.M., D.W. Schindler, M.A. Turner, D.F. Findlay, M.J. Paterson, and R.D. Vinebrooke. 2005. Effects of warming on benthic communities in a boreal lake: Implications of climatic change. *Limnol. Oceanogr.* **50**: 1377-1392.
22. Baulch, H.M., M.A. Turner, D.L. Findlay, R.D. Vinebrooke, and W.F. Donahue. 2009. Benthic algal biomass — measurement and errors. *Can. J. Fish. Aquat. Sci.* **66**: 1989-2001.
23. Bayley, S.E., R.S. Behr, and C.A. Kelly. 1986. Retention and release of sulfur from a freshwater wetland. *Water Air Soil Pollut.* **31**: 101-114.
24. Bayley, S.E., D.W. Schindler, K.G. Beaty, B.R. Parker, and M.P. Stainton. 1992. Effect of multiple fires on nutrient yields from streams draining boreal forest and fen watersheds: nitrogen and phosphorus. *Can. J. Fish. Aquat. Sci.* **49**: 584-596.
25. Bayley, S.E., D.W. Schindler, B.R. Parker, M.P. Stainton, and K.G. Beaty. 1992. Effects of forest fire and drought on acidity of a base-poor boreal forest stream: similarities between climatic warming and acidic precipitation. *Biogeochem.* **17**: 191-204.
26. Bayley, S.E., D.H. Vitt, R.W. Newbury, K.G. Beaty, R. Behr, and C. Miller. 1987. Experimental acidification of a *Sphagnum*-dominated peatland: first year results. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 194-205.
27. Beaty, K.G. 1994. Sediment transport in a small stream following two successive forest fires. *Can. J. Fish. Aquat. Sci.* **51**: 2723-2733.
28. Begout Anras, M.L., R.A. Bodaly, and R. McNicol. 1998. Use of an acoustic beam actograph to assess the effects of external tagging procedure on lake whitefish swimming activity. *Tran. Am. Fish. Soc.* **127**: 329-335.
29. Begout Anras, M.L., P.M. Cooley, R.A. Bodaly, L. Anras, and R.J.P. Fudge. 1999. Movement and habitat use by lake whitefish during spawning in a boreal lake: integrating acoustic telemetry and geographic information systems. *Tran. Am. Fish. Soc.* **128**: 939-952.
30. Benson, B.J., J.D. Lenters, J.J. Magnuson, M. Stubbs, T.K. Kratz, P.J. Dillon, R.E. Hecky, and R.C. Lathrop.

2000. Regional coherence of climatic and lake thermal variables of four lake districts in the Upper Great Lakes Region of North America. *Freshw. Biol.* **43**: 517-527.
31. Billyj, B., and I.J. Davies. 1989. Descriptions and ecological notes on seven new species of *Cladotanytarsus* (Chironomidae: Diptera) collected from an experimentally acidified lake. *Can. J. Zool.* **67**: 948-962.
32. Bird, G.A., U. Bergström, S. Nordlinder, S.L. Neal, and G.M. Smith. 1998. Model simulations of the fate of ¹⁴C added to a Canadian Shield lake. *J. Environ. Radioact.* **42**: 209-223.
33. Bird, G.A., R.H. Hesslein, K.H. Mills, W.J. Schwartz, and M.A. Turner. 1998. Bioaccumulation of radionuclides in fertilized Canadian Shield lake basins. *Sci. Tot. Environ.* **218**: 67-83
34. Bird, G.A., K.H. Mills, and W.J. Schwartz. 1999. Accumulation of ⁶⁰Co and ¹³⁴Cs in lake whitefish in a Canadian Shield lake. *Wat. Air Soil Pollut.* **114**: 303-322.
35. Bird, G.A., M. Motycka, J. Rosentreter, W.J. Schwartz, and P. Vilks. 1995. Behaviour of ¹²⁵I added to limnocorrals in two Canadian Shield lakes of differing trophic states. *Sci. Tot. Environ.* **166**: 161-177.
36. Bird, G.A., M.J. Rosentreter, and W.J. Schwartz. 1995. Deformities in the menta of chironomid larvae from the Experimental Lakes Area, Ontario. *Can. J. Fish. Aquat. Sci.* **52**: 2290-2295.
37. Bird, G.A., Schwartz, W.J., and Motycka, M. 1998. Fate of ⁶⁰Co and ¹³⁴Cs added to the hypolimnion of a Canadian Shield lake: accumulation in biota. *Can. J. Fish. Aquat. Sci.* **55**: 987-998.
38. Bird, G.A., M. Stephenson, and R.J. Cornett. 1993. The surface water model for assessing Canada's nuclear fuel waste management concept. *Waste Manag.* **13**: 153-170.
39. Bird, G.A., M. Stephenson, R. Roshon, W.J. Schwartz, and M. Motycka. 1995. Fate of ⁶⁰Co and ¹³⁴Cs added to the hypolimnion of a Canadian Shield lake. *Can. J. Fish. Aquat. Sci.* **52**: 2276-2289.
40. Bird, G.A., W.J. Schwartz, M. Motycka, and J. Rosentreter. 1998. Behavior of ⁶⁰Co and ¹³⁴Cs in a Canadian Shield lake over 5 years. *Sci. Total Environ.* **212**: 115-135.
41. Bird, G.A., W.J. Schwartz, and J. Rosentreter. 1995. Evolution of ¹³¹I from freshwater and its partitioning in simple aquatic microcosms. *Sci. Total Environ.* **164**: 151-159.
42. Blais, J.M., R.L. France, L.E. Kimpe, and R.J. Cornett. 1998. Climatic changes in northwestern Ontario have had a greater effect on erosion and sediment accumulation than logging and fire: Evidence from ²¹⁰Pb chronology in lake sediments. *Biogeochem.* **43**: 235-252.
43. Blanchfield, P.J., L.S. Flavelle, T.H. Hodge, and D.M. Orihel. 2005. The response of lake trout (*Salvelinus namaycush*) to manual tracking. *Tran. Am. Fish. Soc.* **134**: 346-355.
44. Blanchfield, P.J., M.J. Paterson, J.A. Shearer, and D.W. Schindler. 2009. Johnson and Vallentyne's legacy: 40 years of aquatic research at the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **66**: 1831-1836.
45. Blanchfield, P.J., L.S. Tate, J.M. Plumb, M-L. Acolas, and K.G. Beaty. 2009. Seasonal habitat selection by lake trout (*Salvelinus namaycush*) in a small Canadian Shield lake: constraints imposed by winter conditions. *Aquat. Ecol.* **43**: 777-787.
46. Blanchfield, P.J., L.S. Tate, and C.L. Podemski. 2009. Survival and behaviour of rainbow trout (*Oncorhynchus mykiss*) released from an experimental aquaculture operation. *Can. J. Fish. Aquat. Sci.* **66**: 1976-1988.

47. Bodaly, R.A., K.G. Beaty, L.H. Hendzel, A.R. Majewski, M.J. Paterson, K.R. Rolffhus, A.F. Penn, V.L. St. Louis, B.D. Hall, C.J.D. Matthews, K.A. Cherewyk, M. Mailman, J.P. Hurley, S.L. Schiff, and J.J. Venkiteswaran. 2005. Mercury and the FLUDEX project: response. *Environ. Sci. Technol.* **39**: 185A-186A.
48. Bodaly, R.A., K.G. Beaty, A.R. Majewski, M.J. Paterson, K.R. Rolffhus, A.F. Penn, V.L. St. Louis, B.D. Hall, C.J. Matthews, K.A. Cherewyk, M. Mailman, J.P. Hurley, S.L. Schiff, and J.J. Venkiteswaran. 2004. Experimenting with hydroelectric reservoirs. *Environ. Sci. Technol.* **38**: 347A-352A.
49. Bodaly, R.A., J.W.M. Rudd, R.J.P. Fudge, and C.A. Kelly. 1993. Mercury concentrations in fish related to size of remote Canadian Shield lakes. *Can. J. Fish. Aquat. Sci.* **50**: 980-987.
50. Bodaly, R.A., and R.J.P. Fudge. 1999. Uptake of mercury by fish in an experimental boreal reservoir. *Arch. Environ. Contam. Toxicol.* **37**: 103-109.
51. Bottenheim, J.W., K.A. Brice, and K.G. Anlauf. 1984. Discussion of a lagrangian trajectory model describing long-range transport of oxides of nitrogen, the incorporation of pan in the chemical mechanism, and supporting measurements of pan and nitrate species at rural sites in Ontario, Canada. *Atmos. Environ.* **18**: 2609-2619.
52. Bower, P., and D. McCorkle. 1980. Gas exchange, photosynthetic uptake and carbon budget for a radiocarbon addition to a small enclosure in a stratified lake. *Can. J. Fish. Aquat. Sci.* **37**: 464-471.
53. Bower, P.M., C.A. Kelly, E.J. Fee, J.A. Shearer, D.R. DeClercq, and D.W. Schindler. 1987. Simultaneous measurement of primary production of whole-lake and bottle radiocarbon additions. *Limnol. Oceanogr.* **32**: 299-312.
54. Branfireun, B.A., A. Heyes, and N.T. Roulet. 1996. The hydrology and methylmercury dynamics of a Precambrian Shield headwater peatland. *Water Resour. Res.* **32**: 1785-1794.
55. Branfireun, B.A., D. Hilbert, and N.T. Roulet. 1998. Sinks and sources of methylmercury in a boreal catchment. *Biogeochem.* **41**: 277-291.
56. Branfireun, B.A., D.P. Krabbenhoft, H. Hintelmann, R.J. Hunt, J.P. Hurley, and J.W.M. Rudd. 2005. Speciation and transport of newly deposited mercury in a boreal forest wetland: A stable mercury isotope approach. *Water Resour. Res.* **41**, W06016, doi: 10.1029/2004WR003219.
57. Branfireun, B.A., and N.T. Roulet. 1998. The baseflow and stormflow hydrology of a Precambrian Shield headwater peatland. *Hydrol. Process.* **12**: 57-72.
58. Branfireun, B. A., N. T. Roulet, C. Kelly and J. W. M. Rudd. 1999. Sulphate stimulation of mercury methylation in a boreal peatland: Toward a link between acid rain and the mercury cycle. *Global Biogeochem. Cycles* **13**: 743-750.
59. Bristow, C.E., A. Morin, R. Hesslein, and C. Podemski. 2008. Phosphorus budget and productivity of an experimental lake during the initial three years of cage aquaculture. *Can. J. Fish. Aquat. Sci.* **65**: 2485-2495.
60. Broecker, W.S., T-H. Peng, G. Mathieu, R. Hesslein, and T. Torgersen. 1980. Gas exchange rate measurements in natural systems. *Radiocarbon* **22**: 676-683.
61. Brown, S.B., K.H. Mills, and T.J. Hara. 1998. Capture-induced changes in plasma cortisol, thyroid hormones, glucose, and electrolytes in lake whitefish (*Coregonus clupeaformis*) and white sucker (*Catostomus commersoni*) from softwater lakes. *Arch. Hydrobiol. Spec. Issues Advanc. Limnol.* **50**: 273-282.

62. Brunskill, G.J., B.W. Graham, and J.W.M. Rudd. 1980. Experimental studies on the effect of arsenic on microbial degradation of organic matter and algal growth. *Can. J. Fish. Aquat. Sci.* **37**: 415-423.
63. Brunskill, G.J., W.L. Lockhart, P. Wilkinson, B.N. Billeck, R.V. Hunt, and R. Wagemann. 1995. Current and historical inputs of mercury to high-latitude lakes in Canada and to Hudson Bay. *Water Air Soil Pollut.* **80**: 603-610.
64. Brunskill, G.J., D. Povoledo, B.W. Graham, and M.P. Stainton. 1971. Chemistry of surface sediments of sixteen lakes in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 277-294.
65. Brunskill, G.J., and D.W. Schindler. 1971. Geography and bathymetry of selected lake basins, Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 139-155.
66. Brunskill, G.J., and P. Wilkinson. 1985. Mass balance of uranium-series nuclides in streams and Lake 239 of the Experimental Lakes Area, Ontario, Canada. *Int. Ver. theor. angew. Limnol. Verh.* **22**: 2469.
67. Brunskill, G.J., and P. Wilkinson. 1987. Annual supply of ^{238}U , ^{234}U , ^{230}Th , ^{226}Ra , ^{210}Pb , ^{210}Po , and ^{232}Th to Lake 239 (Experimental Lakes Area, Ontario) from terrestrial and atmospheric sources. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 215-230.
68. Bubier, J.L., T.R. Moore, and N.T. Roulet. 1993. Methane emissions from wetlands in the midboreal region of northern Ontario, Canada. *Ecology* **74**: 2240-2254.
69. Campbell, P. 1994. Phosphorus budgets and stoichiometry during the open-water season in two unmanipulated lakes in the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **51**: 2739-2755.
70. Campbell, P., and T. Torgersen. 1980. Maintenance of iron meromixis by iron redeposition in a rapidly flushed monimolimnion. *Can. J. Fish. Aquat. Sci.* **37**: 1303-1313.
71. Carpenter, S.R., S.S. Chisholm, C.J. Krebs, D.W. Schindler, R.F. Wright. 1995. Ecosystem experiments. *Science* **269**: 324-327. (Special issue on Frontiers in Ecology).
72. Chadwick, S.P., C.L. Babiarz, J.P. Hurley, and D.E. Armstrong. 2006. Influences of iron, manganese, and dissolved organic carbon on the hypolimnetic cycling of amended mercury. *Sci. Total Environ.* **368**: 177-188.
73. Chamberland, G., D. Belanger, N. Lariviere, L. Vermette, J.F. Klaverkamp, and J.S. Blais. 1995. Abnormal porphyrin profile in mussels exposed to low concentrations of cadmium in an experimental Precambrian Shield lake. *Can. J. Fish. Aquat. Sci.* **52**: 1286-1293.
74. Chan, Y.K., and N.E.R. Campbell. 1974. A rapid gas extraction technique for the quantitative study of denitrification in aquatic systems by N-isotope ratio analysis. *Can. J. Microbiol.* **20**: 275-281.
75. Chan, Y.K., and N.E.R. Campbell. 1975. Temperature effects on denitrification products by two aquatic *Pseudomonas* species. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 2674-2681.
76. Chan, Y.K., and N.E.R. Campbell. 1980. Denitrification in Lake 227 during summer stratification. *Can. J. Fish. Aquat. Sci.* **37**: 506-512.
77. Chow-Fraser, P., D.O. Trew, D. Findlay, and M. Stainton. 1994. A test of hypotheses to explain the sigmoidal relationship between total phosphorus and chlorophyll *a* concentrations in Canadian lakes. *Can. J.*

- Fish. Aquat. Sci.* **51**: 2052-2065.
78. Christensen, M.R., M.D. Graham, R.D. Vinebrooke, D.L. Findlay, M.J. Paterson, and M.A. Turner. 2006. Multiple anthropogenic stressors cause ecological surprises in boreal lakes. *Glob. Change Biol.* **12**: 2316-2322.
79. Chrzanowski, T.H., M. Kyle, J.J. Elser, and R.W. Sterner. 1997. Element ratios and growth dynamics of bacteria in an oligotrophic Canadian Shield lake. *Aquat. Microb. Ecol.* **11**: 119-125.
80. Chrzanowski, T.H., R.W. Sterner, and J.J. Elser. 1995. Nutrient enrichment and nutrient regeneration stimulate bacterioplankton growth. *Microb. Ecol.* **29**:221-230.
81. Clarisse, O., D. Foucher, and H. Hintelmann. 2008. Methylmercury speciation in the dissolved phase of a stratified lake using the diffusive gradient in thin film technique. *Environ. Pollut.* **157**: 987-993
82. Clasen, J.L., S.M. Brigden, J.P. Payet, and C.A. Suttle. 2008. Evidence that viral abundance across oceans and lakes is driven by different biological factors. *Freshw. Biol.* **53**: 1090-1100.
83. Clasen, J.L. and C.A. Suttle. 2009. Identification of freshwater phycodnaviridae and their potential phytoplankton hosts, using DNA pol sequence fragments and a genetic-distance analysis. *Appl. Environ. Microbiol.* **75**: 991-997.
84. Cleugh, T.R., and B.W. Hauser. 1971. Results of the initial survey of the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 129-137.
85. Coey, J.M.D., and D.W. Schindler. 1974. Iron compounds in lake sediments. *Can. J. Earth Sci.* **11**: 1489-1493.
86. Coey, J.M.D., and D.W. Schindler. 1977. Magnetic order in freshwater ferromanganese nodules. *Physica* **86-88B**: 823-824.
87. Conroy, J.C., and B. Bilyj. 1998. Water mites from Canada, with description of a new species, *Atractides (Atractides) ontarioensis* (Acari: Hygrobatidae). *Int. J. Acarology* **24**: 137-142.
88. Cook, R.B. 1984. Distributions of ferrous iron and sulfide in an anoxic hypolimnion. *Can. J. Fish. Aquat. Sci.* **41**: 286-293.
89. Cook, R.B. 1984. Man and the biogeochemical cycles - interacting with the elements. *Environ.* **26**: 10-15, 38-40.
90. Cook, R.B., C.A. Kelly, D.W. Schindler, and M.A. Turner. 1986. Mechanisms of hydrogen ion neutralization in an experimentally acidified lake. *Limnol. Oceanogr.* **31**: 134-148.
91. Cook, R.B., and D.W. Schindler. 1983. The biogeochemistry of sulfur in an experimentally acidified lake. *Env. Biogeochem. Ecol. Bull. (Stockholm)* **35**: 115-127.
92. Cooley, P.M. and W.G. Franzin. 2008. Predicting the spatial mud energy and mud deposition boundary depth in a small boreal reservoir before and after draw down. *Lake Reservoir Manag.* **24**: 261-274.
93. Cottingham, K.L., J.A. Rusak, and P.R. Leavitt. 2000. Increased ecosystem variability and reduced predictability following fertilisation: evidence from paleolimnology. *Ecol. Lett.* **3**: 340-348.
94. Creed, I.F., F.D. Beall, T.A. Clair, P.J. Dillon, and R.H. Hesslein. 2008. Predicting export of dissolved

- organic carbon from forested catchments in glaciated landscapes with shallow soils. *Global Biogeochem. Cycles* **22**: ASAP.
95. Crusius, J., and R.F. Anderson. 1991. Core compression and surficial sediment loss of lake sediments of high porosity caused by gravity coring. *Limnol. Oceanogr.* **36**: 1021-1030.
96. Crusius, J., and R.F. Anderson. 1995a. Evaluating the mobility of ^{137}C , $^{239+240}\text{Pu}$, and ^{210}Pb from their distributions in laminated lake sediments. *J. Paleolimnol.* **13**: 119-141.
97. Crusius, J., and R.F. Anderson. 1995b. Sediment focusing in six small lakes inferred from radionuclide profiles. *J. Paleolimnol.* **13**: 143-155.
98. Crusius, J., and R. Wanninkhof. 2003. Gas transfer velocities measured at low wind speed over a lake. *Limnol. Oceanogr.* **48**: 1010-1017.
99. Cullen, P.W., R.H. Norris, V.H. Resh, T.B. Reynoldson, D.M. Rosenberg, and M.T. Barbour. 1999. Collaboration in scientific research: a critical need for freshwater ecology. *Freshw. Biol.* **42**: 131-142.
100. Currie, R.S., W.L. Fairchild, M.H. Holoka, and D.C.G. Muir. 2000. Long-term fate and bioavailability of sediment-associated 2,3,7,8-tetrachlorodibenzofuran in littoral enclosures. *Environ. Toxicol. Chem.* **19**: 1491-1500.
101. Currie, R.S., W.L. Fairchild, and D.C.G. Muir. 1997. Remobilization and export of cadmium from lake sediments by emerging insects. *Environ. Toxicol. Chem.* **16**: 2333-2338.
102. Currie, R.S., D.C.G. Muir, W.L. Fairchild, M.H. Holoka, and R.E. Hecky. 1998. Influence of nutrient additions on cadmium bioaccumulation by aquatic invertebrates in littoral enclosures. *Environ. Toxicol. Chem.* **17**: 2435-2443.
103. Curtis, P.J. 1989. Effects of hydrogen ion and sulphate on the phosphorus cycle of a Precambrian Shield lake. *Nature* **337**: 156-158.
104. Curtis, P.J. 1991. P and Fe release from anoxic Precambrian Shield lake sediments mediated by addition of Fe(II) insoluble and Fe(II)-soluble bases. *Int. Ver. theor. angew. Limnol. Verh.* **24**: 2976-2979.
105. Curtis, P.J. 1993. Effect of dissolved organic carbon on ^{59}Fe scavenging. *Limnol. Oceanogr.* **38**: 1554-1561.
106. Curtis, P.J., and D.W. Schindler. 1997. Hydrologic control of dissolved organic matter in low-order Precambrian Shield lakes. *Biogeochem.* **36**: 125-138.
107. Curtis, P. J., and P. Walker. 1994. Release of metals from a Cd-contaminated streambed in response to experimental acidification and neutralization. *Water Resour. Res.* **30**: 3449-3454.
108. Dachs, J., S.J. Eisenreich, J.E. Baker, F-C. Ko, and J.D. Jeremiason. 1999. Coupling of phytoplankton uptake and air-water exchange of persistent organic pollutants. *Environ. Sci. Technol.* **33**: 3653-3660.
109. Davidson, G.A. 1988. A modified tape-peel technique for preparing permanent qualitative microfossil slides. *J. Paleolimnol.* **2**: 229-234.
110. Davies, I.J. 1980. Relationships between dipteran emergence and phytoplankton production in the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **37**: 523-533.

111. Davies, I.J. 1989. Population collapse of the crayfish *Orconectes virilis* in response to experimental whole-lake acidification. *Can. J. Fish. Aquat. Sci.* **46**: 910-922.
112. Davies, I.J., and D.J. Ramsey. 1989. A diver operated suction gun and collection bucket for sampling crayfish and other aquatic macroinvertebrates. *Can. J. Fish. Aquat. Sci.* **46**: 923-927.
113. Davies, J.M., R.H. Hesslein, C.A. Kelly, and R.E. Hecky. 2003. PCO_2 method for measuring photosynthesis and respiration in freshwater lakes. *J. Plankton Res.* **25**: 385-395.
114. Delorme, P.D., W.L. Lockhart, K.H. Mills, and D.C.G. Muir. 1999. Long-term effects of toxaphene and depuration in lake trout and white sucker in a natural ecosystem. *Environ. Toxicol. Chem.* **18**: 1992-2000.
115. Delorme, P. D., D.C.G. Muir, W.L. Lockhart, K.H. Mills, and F.J. Ward. 1993. Depuration of toxaphene in lake trout and white suckers in a natural ecosystem following a single I.P. dose. *Chemosphere* **27**: 1965-1973.
116. Demarty, M., J. Bastien, A. Tremblay, R.H. Hesslein, and R.Gill. 2009. Greenhouse Gas Emissions from Boreal Reservoirs in Manitoba and Quebec, Canada, Measured with Automated Systems. *Environmental Science & Technology* **43**: 8908-8915.
117. DeNoyelles Jr., F., D. Reinke, R. Knoechel, D. Treanor, and C. Altenhofen. 1980. Continuous culturing of natural phytoplankton communities in the Experimental Lakes Area: Effects of enclosure, in situ incubation, light, phosphorus and cadmium. *Can. J. Fish. Aquat. Sci.* **37**: 424-433.
118. Devito, K.J., M.J. Waddington, and B.A. Branfireun. 1997. Flow reversals in peatlands influenced by local groundwater systems. *Hydrol. Proc.* **11**: 103-110.
119. Dickman, M., H.G. Thode, S. Rao, and R. Anderson. 1988. Downcore sulphur isotope ratios and diatom inferred pH in an artificially acidified Canadian Shield lake. *Environ. Pollut.* **49**: 265-288.
120. Dodson, S.I., S.E. Arnott, and K.L. Cottingham. 2000. The relationship in lake communities between primary production and species richness. *Ecology* **81**: 2662-2679.
121. Donahue, W.F. 1998. Evidence for interference in fluorometric hydrogen peroxide determinations using scopoletin-horseradish peroxidase. *Environ. Tox. Chem.* **17**: 783-787.
122. Donahue, W.F., and D.W. Schindler. 1998. Diel emigration and colonization responses of blackfly larvae (Diptera: Simuliidae) to ultraviolet radiation. *Freshw. Biol.* **40**: 357-365.
123. Donahue, W.F., D.W. Schindler, S.J. Page, and M.P. Stainton. 1998. Acid-induced changes in DOC quality in an experimental whole-lake manipulation. *Environ. Sci. Technol.* **32**: 2954-2960.
124. Donahue, W. F., M.A. Turner, D.L. Findlay, and P.R. Leavitt. 2003. The role of solar radiation in structuring the shallow benthic communities of boreal forest lakes. *Limnol. Oceanogr.* **48**: 31-47.
125. Duncan, D.A., and J.F. Klaverkamp. 1983. Tolerance and resistance to cadmium in white suckers (*Catostomus commersoni*) previously exposed to cadmium, mercury, zinc or selenium. *Can. J. Fish. Aquat. Sci.* **40**: 128-138.
126. Dutton, M.D., M. Stephenson, and J.F. Klaverkamp. 1993. A mercury saturation assay for measuring metallothionein in fish. *Environ. Toxicol. Chem.* **12**: 1193-1202.

127. Dyck, B.S., and J.M. Shay. 1999. Biomass and carbon pool of two bogs in the Experimental Lakes Area, northwestern Ontario. *Can. J. Botany* **77**: 291-304.
128. Eckley, C.S., and H. Hintelmann. 2006. Determination of mercury methylation potentials in the water column of lakes across Canada. *Sci. Total Environ.* **368**: 111-125.
129. Edwards, G. 1993. Continuous measurements of greenhouse gas fluxes using diode laser micrometeorological techniques. *CO2 Climate Report* **92**: 2.
130. Elser, J.J. 1999. The pathway to noxious cyanobacteria blooms in lakes: the food web as the final turn. *Freshw. Biol.* **42**: 537-543.
131. Elser, J.J., T.H. Chrzanowski, R.W. Sterner, and K.H. Mills. 1998. Stoichiometric constraints on food-web dynamics: a whole-lake experiment on the Canadian Shield. *Ecosystems* **1**: 120-136.
132. Elser, J.J., T.H. Chrzanowski, R.W. Sterner, J.H. Schampel, D.K. Foster. 1995. Elemental ratios and the uptake and release of nutrients by phytoplankton and bacteria in three lakes of the Canadian Shield. *Microb. Ecol.* **29**: 145-162.
133. Elser, J.J., D.R. Dobberfuhl, N.A. MacKay, and J.H. Schampel. 1996. Organism size, life history and N:P stoichiometry: Towards a unified view of cellular and ecosystem processes. *Bioscience* **46**: 674-684.
134. Elser, J.J., and D.K. Foster. 1998. N:P stoichiometry of sedimentation in lakes of the Canadian Shield: Relationships with seston and zooplankton elemental composition. *Ecoscience* **5**: 56-63.
135. Elser, J.J., D.K. Foster, and R.E. Hecky. 1995. Effects of zooplankton on sedimentation in pelagic ecosystems: theory and test in two lakes of the Canadian Shield. *Biogeochem.* **30**: 143-170.
136. Elser, J.J., and R.P. Hassett. 1994. A stoichiometric analysis of the zooplankton-phytoplankton interaction in marine and freshwater ecosystems. *Nature* **370**: 211-213.
137. Elser, J.J., P. Frost, M. Kyle, J. Urabe, and T. Andersen. 2002. Effects of light and nutrients on plankton stoichiometry and biomass in a P-limited lake. *Hydrobiol.* **481**: 101-112.
138. Elser, J.J., L.B. Stabler, and R.P. Hassett. 1995. Nutrient limitation of bacterial growth and rates of bacterivory in lakes and oceans: a comparative study. *Aquat. Microb. Ecol.* **9**: 105-110.
139. Elser, J.J., R. W. Sterner, A.E. Galford, T.H. Chrzanowski, D.L. Findlay, K.H. Mills, M.J. Paterson, M.P. Stainton, and D.W. Schindler. 2000. Pelagic C:N:P stoichiometry in a eutrophied lake: Responses to a whole-lake food-web manipulation. *Ecosystems* **3**: 293-307.
140. Elser, J.J., and J. Urabe. 1999. The stoichiometry of consumer-driven nutrient recycling: theory, observations, and consequences. *Ecology* **80**: 735-751.
141. Emerson, S. 1975. Chemically enhanced CO₂ gas exchange in a eutrophic lake: a general model. *Limnol. Oceanogr.* **20**: 743-753.
142. Emerson, S. 1975. Gas exchange rates in small Canadian Shield lakes. *Limnol. Oceanogr.* **20**: 754-761.
143. Emerson, S., W.S. Broecker, and D.W. Schindler. 1973. Gas-exchange rates in a small lake as determined by the radon method. *J. Fish. Res. Board Can.* **30**: 1475-1484.

144. Emerson, S., and R. Hesslein. 1973. The distribution and uptake of artificially introduced radium-226 in a small lake. *J. Fish. Res. Board Can.* **30**: 1485-1490.
145. Enache, M., M. A. Paterson, and B. Cumming. 2011. Changes in diatom assemblages since pre-industrial times in 40 reference lakes from the Experimental Lakes Area (northwestern Ontario, Canada). *Journal of Paleolimnology* **46**: 1-15.
146. Fairchild, W.L., D.C.G. Muir, R.S. Currie, and A.L. Yarechewski. 1992. Emerging insects as a biotic pathway for movement of 2,3,7,8-tetrachlorodibenzofuran from lake sediments. *Environ. Toxicol. Chem.* **11**: 867-872.
147. Fee, E.J. 1973. A numerical model for determining integral primary production and its application to Lake Michigan. *J. Fish. Res. Board Can.* **30**: 1447-1468.
148. Fee, E.J. 1973. Modelling primary production in water bodies: A numerical approach that allows vertical inhomogeneities. *J. Fish. Res. Board Can.* **30**: 1469-1473.
149. Fee, E.J. 1975. The importance of diurnal variation of photosynthesis vs light curves to estimates of integral primary production. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 39-46.
150. Fee, E.J. 1976. The vertical and seasonal distribution of chlorophyll in lakes of the Experimental Lakes Area, northwestern Ontario: Implications for primary production estimates. *Limnol. Oceanogr.* **21**: 767-783.
151. Fee, E.J. 1978. A procedure for improving estimates of in situ primary production at low irradiances with an incubator technique. *Int. Ver. theor. angew. Limnol. Verh.* **20**: 59-67.
152. Fee, E.J. 1979. A relation between lake morphometry and primary production and its use in interpreting whole-lake eutrophication experiments. *Limnol. Oceanogr.* **24**: 401-416.
153. Fee, E.J. 1980. Important factors for estimating annual phytoplankton production in the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **37**: 513-522.
154. Fee, E.J. 1980. Reply to comments by Patalas and Schindler. *Limnol. Oceanogr.* **25**: 1152-1153.
155. Fee, E.J., and R.E. Hecky. 1992. Introduction to the Northwest Ontario Lake Size Series (NOLSS). *Can. J. Fish. Aquat. Sci.* **49**: 2434-2444.
156. Fee, E.J., R.E. Hecky, S.E.M. Kasian, and D.R. Cruikshank. 1996. Effects of lake size, water clarity, and climatic variability on mixing depths in Canadian Shield lakes. *Limnol. Oceanogr.* **41**: 912-920.
157. Fee, E.J., R.E. Hecky, G.W. Regehr, L.L. Hendzel, and P. Wilkinson. 1994. Effects of lake size on nutrient availability in the mixed layer during summer stratification. *Can. J. Fish. Aquat. Sci.* **51**: 2756-2768.
158. Fee, E.J., R.E. Hecky, and H.E. Welch. 1987. Phytoplankton photosynthesis parameters in central Canadian lakes. *J. Plankton Res.* **9**: 305-316.
159. Fee, E.J., J.A. Shearer, E.R. DeBruyn, and E.U. Schindler. 1992. Effects of lake size on phytoplankton photosynthesis. *Can. J. Fish. Aquat. Sci.* **49**: 2445-2459.
160. Findlay, D.L. 2003. Response of phytoplankton communities to acidification and recovery in Killarney Park and the Experimental Lakes Area, Ontario. *Ambio* **32**: 190-195.
161. Findlay, D.L., R.E. Hecky, L.L. Hendzel, M.P. Stainton, and G.W. Regehr. 1994. Relationship between N₂-

- fixation and heterocyst abundance and its relevance to the nitrogen budget of Lake 227. *Can. J. Fish. Aquat. Sci.* **51**: 2254-2266.
162. Findlay, D.L., R. E. Hecky, S.E.M. Kasian, M.P. Stainton, L.L. Hendzel, and E.U. Schindler. 1999. Effects on phytoplankton of nutrients added in conjunction with acidification. *Freshw. Biol.* **41**: 131-145.
163. Findlay, D.L., and S.E.M. Kasian. 1986. Phytoplankton community responses to acidification of Lake 223, Experimental Lakes Area, northwestern Ontario. *Water Air Soil Pollut.* **30**: 719-726.
164. Findlay, D.L., and S.E.M. Kasian. 1987. Phytoplankton community responses to nutrient addition in Lake 226, Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 35-46.
165. Findlay, D.L., and S.E.M. Kasian. 1990. Phytoplankton communities of lakes experimentally acidified with sulfuric and nitric acids. *Can. J. Fish. Aquat. Sci.* **47**: 1378-1386.
166. Findlay, D.L., and S.E.M. Kasian. 1991. Response of a phytoplankton community to controlled partial recovery from experimental acidification. *Can. J. Fish. Aquat. Sci.* **48**: 1022-1029.
167. Findlay, D.L., and S.E.M. Kasian. 1996. The effect of incremental pH recovery on the Lake 223 phytoplankton community. *Can. J. Fish. Aquat. Sci.* **53**: 856-864.
168. Findlay, D.L., S.E.M. Kasian, L.L. Hendzel, G.W. Regehr, E.U. Schindler, and J.A. Shearer. 1994. Biomaniipulation of Lake 221 in the Experimental Lakes Area (ELA): effects on phytoplankton and nutrients. *Can. J. Fish. Aquat. Sci.* **51**: 2794-2807.
169. Findlay, D.L., S.E.M. Kasian, and E.U. Schindler. 1996. Long-term effects of low cadmium concentrations on phytoplankton. *Can. J. Fish. Aquat. Sci.* **53**: 1903-1912.
170. Findlay, D. L., S. E. M. Kasian, M. P. Stainton, K. Beaty, and M. Lyng. 2001. Climatic influences on algal populations of boreal forest lakes in the Experimental Lakes Area. *Limnol. Oceanogr.* **46**: 1784-1793.
171. Findlay, D.L., S.E.M. Kasian, M.T. Turner, and M.P. Stainton. 1999. Responses of phytoplankton and epilithon during acidification and early recovery of a lake. *Freshw. Biol.* **42**: 159-175.
172. Findlay, D.L., H.J. Kling, H. Ronicke, and W.J. Findlay. 1998. A paleolimnological study of eutrophied Lake Arendsee (Germany). *J. Paleolimnology* **19**: 41-54.
173. Findlay, D.L., M.J. Paterson, L.L. Hendzel, and H.J. Kling. 2005. Factors influencing *Gonyostomum semen* blooms in a small boreal reservoir lake. *Hydrobiologia* **533**: 243-252.
174. Findlay D.L., C.L. Podemski, and S.E.M. Kasian. 2009. Aquaculture impacts on the algal and bacterial communities in a small boreal forest lake. *Can. J. Fish. Aquat. Sci.* **66**: 1936-1948.
175. Findlay, D.L., and J.A. Shearer. 1992. Relationships between sedimentary diatom assemblages and lakewater pH values in the Experimental Lakes Area. *J. Paleolimnology* **7**:145-156.
176. Findlay, D.L., M.J. Vanni, M. Paterson, K.H. Mills, S.E.M. Kasian, W.J. Findlay, and A.G. Salki. 2005. Dynamics of a boreal lake ecosystem during a long-term manipulation of top predators. *Ecosystems* **8**: 603-618.
177. Flett, R.J., R.D. Hamilton, and N.E.R. Campbell. 1975. Nitrogen fixation in aquatic environments - a critical study of acetylene reduction assay. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 2664-2668.

178. Flett, R.J., R.D. Hamilton, and N.E.R. Campbell. 1976. Aquatic acetylene reduction techniques. Solutions to several problems. *Can. J. Microbiol.* **22**: 43-51.
179. Flett, R.J., J.W.M. Rudd, and R.D. Hamilton. 1975. Acetylene reduction assays for nitrogen fixation in freshwaters: a note of caution. *Appl. Microbiol.* **29**: 580-583.
180. Flett, R.J., D.W. Schindler, R.D. Hamilton, and N.E.R. Campbell. 1980. Nitrogen fixation in Canadian Precambrian Shield lakes. *Can. J. Fish. Aquat. Sci.* **37**: 494-505.
181. Fox, J.W., W.A. Nelson, and E. McCauley. 2010. Coexistence mechanisms and the paradox of the plankton: quantifying selection from noisy data. *Ecology* **91**: 1774-1786.
182. France, R.L. 1982. Comment on *Daphnia* respiration in low pH water. Re: The importance of carbon dioxide in laboratory acidification experiments. *Hydrobiologia* **94**: 195-198.
183. France, R.L. 1984. Comparative tolerance to low pH of three life stages of the crayfish, *Orconectes virilis*. *Can. J. Zool.* **62**: 2360-2363.
184. France, R.L. 1985. Low pH avoidance by crayfish (*Orconectes virilis*): evidence for sensory conditioning. *Can. J. Zool.* **63**: 258-262.
185. France, R.L. 1985. Preliminary investigation of effects of sublethal acid exposure on maternal behavior in the crayfish *Orconectes virilis*. *Bull. Environ. Contam. Toxicol.* **35**: 641-645.
186. France, R.L. 1985. Relationship of crayfish (*Orconectes virilis*) growth to population abundance and system productivity in small oligotrophic lakes in the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **42**: 1096-1102.
187. France, R.L. 1987. Calcium and trace metal composition of crayfish (*Orconectes virilis*) in relation to experimental lake acidification. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 107-113.
188. France, R.L. 1987. Reproductive impairment of the crayfish *Orconectes virilis* in response to acidification of Lake 223. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 97-106.
189. France, R.L. 1997. Land-water linkages: influences of riparian deforestation on lake thermocline depth and possible consequences for cold stenotherms. *Can. J. Fish. Aquat. Sci.* **54**: 1299-1305.
190. France, R.L., and L. Graham. 1985. Increased microsporidian parasitism of the crayfish *Orconectes virilis* in an experimentally acidified lake. *Water Air Soil Pollut.* **26**: 129-136.
191. Friesen, K.J., M.M. Foga, and M.D. Loewen. 1996. Aquatic photodegradation of polychlorinated dibenzofurans: Rates and photoproduct analysis. *Environ. Sci. Technol.* **30**: 2504-2510.
192. Frost, P.C., and J.J. Elser. 2002. Effects of light and nutrients on the accumulation and elemental composition of epilithon in boreal lakes. *Freshw. Biol.* **47**: 173-184.
193. Frost, P.C. and J.J. Elser. 2002. Growth responses of littoral mayflies to the phosphorus content of their food. *Ecol. Lett.* **5**: 232-240.
194. Frost, P.C., J.J. Elser, and M.A. Turner. 2002. Effects of caddisfly grazers on the elemental composition of epilithon in a boreal lake. *J. N. Am. Benthol. Soc.* **21**: 54-63.
195. Frost, P.C., R.S. Stelzer, G.A. Lamberti, and J.J. Elser. 2002. Ecological stoichiometry of trophic

- interactions in the benthos: understanding the role of C:N:P ratios in lentic and lotic habitats. *J. N. Am. Benthol. Soc.* **21**: 515-528.
196. Frost, P.C., S.E. Tank, M.A. Turner, and J.J. Elser. 2003. Elemental composition of littoral invertebrates from oligotrophic and eutrophic Canadian lakes. *J. N. Am. Benthol. Soc.* **22**: 51-62.
197. Frost, P.C., and M.A. Xenopoulos. 2002. Ambient solar ultraviolet radiation and its effects on phosphorus flux into boreal lake phytoplankton communities. *Can. J. Fish. Aquat. Sci.* **59**: 1090-1095.
198. Furutani, A., and J.W.M. Rudd. 1980. Measurement of mercury methylation in lake water and sediment samples. *Appl. Environ. Microbiol.* **40**: 770-776.
199. Furutani, A., J.W.M. Rudd, and C.A. Kelly. 1984. A method for measuring the response of sediment microbial communities to environmental perturbations. *Can. J. Microbiol.* **30**: 1408-1414.
200. Galford, A.E., and R.W. Sterner. 2000. Correlations and seasonal patterns in grazing and potential phytoplankton growth. *Int. Ver. theor. angew. Limnol. Verh.* **27**: 2996-3000.
201. Gerrard, P.M., and V.L. St. Louis. 2000. The effects of experimental reservoir creation on the bioaccumulation of MeHg and reproductive success of tree swallows (*Tachycineta bicolor*). *Environ. Sci. Technol.* **35**: 1329-1338.
202. Golding, G.R., C.A. Kelly, R. Sparling, P.C. Loewen, J.W. M. Rudd, and T. Barkay. 2002. Evidence for facilitated uptake of Hg(II) by *Vibrio anguillarum* and *Escherichia coli* under anaerobic and aerobic conditions. *Limnol. Oceanogr.* **47**: 967-975.
203. Gontcharov, A.A., D. L. Findlay, H. J. Kling, and M.M. Watanabe. 2002. Desmids (Desmidiaceae, Streptophyta) from the Experimental Lakes Area, Ontario, Canada. The genera *Actinotaenium* and *Cosmarium*. *Algalogical Studies* **106**: 17-41.
204. Gorham, E. 1998. Acid deposition and its ecological effects: a brief history of research. *Environ. Sci. Policy* **1**: 153-166.
205. Gorham, E., S.E. Bayley, and D.W. Schindler. 1984. Ecological effects of acid deposition upon peatlands: a neglected field in 'acid-rain' research. *Can. J. Fish. Aquat. Sci.* **41**: 1256-1268.
206. Graham, B.W., R.D. Hamilton, and N.E.R. Campbell. 1980. Comparison of the nitrogen-15 uptake and acetylene reduction methods for estimating the rates of nitrogen fixation by freshwater blue-green algae. *Can. J. Fish. Aquat. Sci.* **37**: 488-493.
207. Graham, M.D., R.D. Vinebrooke, and M. Turner. 2006. Coupling of boreal forests and lakes: Effects of conifer pollen on littoral communities. *Limnol. Oceanogr.* **51**: 1524-1529.
208. Graham, M.D., R.D. Vinebrooke, B. Keller, J. Heneberry, K.H. Nicholls, and D.L. Findlay. 2007. Comparative responses of phytoplankton during chemical recovery in atmospherically and experimentally acidified lakes. *J. Phycology* **43**: 908-923.
209. Graham, R.W., and M.A. Turner. 1987. Photoinhibition of respiration in epilithic periphyton. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 150-153.
210. Grantham, B.A., and B.J. Hann. 1994. Leeches (Annelida: Hirudinea) in the Experimental Lakes Area, northwestern Ontario, Canada: patterns of species composition in relation to environment. *Can. J. Fish. Aquat. Sci.* **51**: 1600-1609.

211. Grapentine, L.C., and D.M. Rosenberg. 1992. Responses of the freshwater amphipod *Hyalloa azteca* to environmental acidification. *Can. J. Fish. Aquat. Sci.* **49**: 52-64.
212. Graydon, J.A., V.L. St. Louis, S.E. Lindberg, H. Hintelmann, and D.P. Krabbenhoft. 2006. Investigation of mercury exchange between forest canopy and the atmosphere using a new dynamic chamber. *Environ. Sci. Technol.* **40**: 4680-4688.
213. Graydon, J.A., V.L. St. Louis, H. Hintelmann, S.E. Lindberg, K.A. Sandilands, J.W.M. Rudd, C.A. Kelly, B.D. Hall, and L.D. Mowat. 2008. Long-term wet and dry deposition of total and methyl mercury in the remote boreal ecoregion of Canada. *Environ. Sci. Technol.* **42**: 8345-8351.
214. Graydon, J.A., V.L. St. Louis, H. Hintelmann, S.E. Lindberg, K.A. Sandilands, J.W.M. Rudd, C.A. Kelly, M.T. Tate, D.P. Krabbenhoft, and I. Lehnherr. 2009. Investigation of uptake and retention of atmospheric Hg(II) by boreal forest plants using stable hg isotopes. *Environ. Sci. Technol.* **43**: 4960-4966.
215. Groulx, G.R., and D.C. Lasenby. 1992. Temporal and spatial variation in the amount of cadmium in the phantom midge larvae (*Chaoborus* spp.). *Arch. Environ. Contam. Toxicol.* **23**: 370-374.
216. Grover, J.P., and T.H. Chrzanowski. 2000. Seasonal patterns of substrate utilization by bacterioplankton: case studies in four temperate lakes of different latitudes. *Aquat. Microbial Ecol.* **23**: 43-54.
217. Guildford, S.J., and R.E. Hecky. 2000. Total nitrogen, total phosphorus, and nutrient limitation in lakes and oceans: Is there a common relationship? *Limnol. Oceanogr.* **45**: 1213-1223.
218. Guildford, S.J., L.L. Hendzel, H.J. Kling, E.J. Fee, G.G.C. Robinson, R.E. Hecky, and S. Kasian. 1994. Effects of lake size on phytoplankton nutrient status. *Can. J. Fish. Aquat. Sci.* **51**: 2769-2783.
219. Gunn, J. M., and K.H. Mills. 1998. The potential for restoration of acid-damaged lake trout lakes. *J. Restoration Ecology* **6**: 390-397.
220. Hall, B.D., R.A. Bodaly, R.J.P. Fudge, J.W.M. Rudd, and D.M. Rosenberg. 1997. Food as the dominant pathway of methyl mercury uptake by fish. *Water Air Soil Pollut.* **100**: 13-24.
221. Hall, B.D., K.A. Cherewyk, M.J. Paterson, and R.A. Bodaly. 2009. Changes in methyl mercury concentrations in zooplankton from four experimental reservoirs with differing amounts of carbon in the flooded catchments. *Can. J. Fish. Aquat. Sci.* **66**: 1910-1919.
222. Hall, B.D., H. Manolopoulos, J.P. Hurley, J.J. Schauer, V.L. St. Louis, D. Kenski, J. Graydon, C.L. Babiartz, L.B. Cleckner, and G.J. Keeler. 2005. Methyl and total mercury in precipitation in the Great Lakes region. *Atmos. Environ.* **39**: 7557-7569.
223. Hall, B.D., D.M. Rosenberg, and A.P. Wiens. 1998. Methyl mercury in aquatic insects from an experimental reservoir. *Can. J. Fish. Aquat. Sci.* **55**: 2036-2047.
224. Hall, B.D. and V.L. St. Louis. 2004. Methylmercury and total mercury in plant litter decomposing in upland forests and flooded landscapes. *Environ. Sci. Technol.* **38**: 5010-5021.
225. Hall, B.D., V.L. St. Louis, and R.A. Bodaly. 2004. The stimulation of methylmercury production by decomposition of flooded birch leaves and jack pine needles. *Biogeochem.* **68**: 107-129.
226. Hall, B.D., V.L. St. Louis, K.R. Rolffus, R.A. Bodaly, K.G. Beaty, M.J. Paterson, and K.A. Peech Cherewyk. 2005. Impacts of reservoir creation on the biogeochemical cycling of methyl mercury and total

227. Hall, R.J. 1994. Responses of benthic communities to episodic acid disturbances in a lake outflow stream at the Experimental Lakes Area, Ontario. *Can. J. Fish. Aquat. Sci.* **51**: 1877-1892.
228. Hamilton, A.L. 1971. Zoobenthos of fifteen lakes in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 257-263.
229. Hamilton, A.L. 1991. The Stockholm Water Prize and the Experimental Lakes Area [Guest Editorial]. *Can. J. Fish. Aquat. Sci.* **48**: 1132-1135.
230. Hann, B.J., P.R. Leavitt, and P.S.S. Chang. 1994. Cladocera community response to experimental eutrophication in Lake 227 as recorded in laminated sediments. *Can. J. Fish. Aquat. Sci.* **51**: 2312-2321.
231. Hann, B. J., and M. A. Turner. 1999. Exploitation by microcrustacea of a new littoral habitat in an acidified lake. *Hydrobiol.* **416**: 65-75.
232. Hann, B. J., and M. A. Turner. 2000. Littoral microcrustacea in Lake 302S in the Experimental Lakes Area of Canada: Acidification and recovery. *Freshw. Biol.* **43**: 133-146.
233. Hann, B. J., and M. A. Turner. 2000. Erratum: Littoral microcrustacea in Lake 302S in the Experimental Lakes Area of Canada: Acidification and recovery (Freshwater Biology (2000) 43:133-146). *Freshw. Biol.* **43**: 373-374.
234. Harris, R.C., and R.A. Bodaly. 1998. Temperature, growth and dietary effects on fish mercury dynamics in two Ontario lakes. *Biogeochem.* **40**: 175-187.
235. Harris, R.C., J.W.M. Rudd M. Amyot, C.L. Babiarz, K.G. Beaty, P.J. Blanchfield, R.A. Bodaly, B.A. Branfireum, C.C. Gilmour, J.A. Graydon, A. Heyes, H. Hintelmann, J.P. Hurley, C.A. Kelly, D.P. Krabbenhoft, S.E. Lindberg, R.P. Mason, M.J. Paterson, C.L. Podemski, A. Robinson, K.A. Sandilands, G.R. Southworth, V.L. St.Louis, and M.T. Tate. 2007. Whole-ecosystem study shows rapid fish-mercury response to changes in mercury deposition. *Proc. Nat. Acad. Sci. USA* **104**: 16586-16591.
236. Harrison, S.E., J.F. Klaverkamp, and R.H. Hesslein. 1990. Fates of metal radiotracers added to whole lake: Accumulation in fathead minnows (*Pimephales promelas*) and lake trout (*Salvelinus namaycush*). *Water Air Soil Pollut.* **52**: 277-293.
237. Hassett, R.P., B. Cardinale, L.B. Stabler, and J.J. Elser. 1997. Ecological stoichiometry of N and P in lakes and oceans with emphasis on the zooplankton- phytoplankton interaction. *Limnol. Oceanogr.* **42**: 648-662.
238. Healey, F.P. 1977. Ammonium and urea uptake by some freshwater algae. *Can. J. Bot.* **55**: 51-69.
239. Healey, F.P. 1983. Effect of temperature and light intensity on the growth rate of *Synura sphagnicola*. *J. Plank. Res.* **5**: 767-774.
240. Healey, F.P., and L.L. Hendzel. 1979. Fluorometric measurement of alkaline phosphatase activity in algae. *Freshw. Biol.* **9**: 429-439.
241. Healey, F.P., and L.L. Hendzel. 1980. Physiological indicators of nutrient deficiency in lake phytoplankton. *Can. J. Fish. Aquat. Sci.* **37**: 442-453.
242. Hecky, R.E., P. Campbell, and L.L. Hendzel. 1993. The stoichiometry of carbon, nitrogen, and phosphorus

- in particulate matter of lakes and oceans. *Limnol. Oceanogr.* 38: 709-724.
243. Hecky, R.E., and R.H. Hesslein. 1995. Contributions of benthic algae to lake food webs as revealed by stable isotope analysis. *J. N. Am. Benthol. Soc.* 14: 631-653.
244. Hecky, R.E., and P. Kilham. 1988. Nutrient limitation of phytoplankton in freshwater and marine environments: A review of recent evidence on the effects of enrichment. *Freshw. Biol.* 9: 429-439.
245. Hecky, R.E., D.M. Rosenberg, and P. Campbell. 1994. The 25th Anniversary of the Experimental Lakes Area and the history of Lake 227. *Can. J. Fish. Aquat. Sci.* 51: 2243-2246.
246. Hecky, R.E., P. Campbell, and D.R. Rosenberg. 1994. Introduction to experimental lakes and natural processes: 25 years of observing natural ecosystems at the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* 51: 2721-2722.
247. Helmus, M.R., W. Keller, M.J. Paterson, N.D. Yan, C.H. Cannon, and J.A. Rusak. 2010. Communities contain closely related species during ecosystem disturbance. *Ecology Letters* 13: 162-174.
248. Hendzel, L.L., R.E. Hecky, and D.L. Findlay. 1994. Recent changes of nitrogen fixation in Lake 227 in response to reduction of the N:P loading ratio. *Can. J. Fish. Aquat. Sci.* 51: 2247-2253.
249. Hendzel, L.L., C.J.D. Matthews, J.J. Venkiteswaran, V.L. St. Louis, D. Burton, E.M. Joyce, and R.A. Bodaly. 2005. Nitrous oxide (N₂O) fluxes in three experimental boreal forest reservoirs. *Environ. Sci. Technol.* 39: 4353-4360.
250. Herczeg, A.L., W.S. Broecker, R.F. Anderson, S.L. Schiff, and D.W. Schindler. 1985. A new method for monitoring temporal trends in the acidity of freshwaters. *Nature* 315: 133-135.
251. Herczeg, A.L., and R.H. Hesslein. 1984. Determination of hydrogen ion concentration in softwater lakes using carbon dioxide equilibria. *Geochim. Cosmochim. Acta* 48: 837-845.
252. Hesslein, R., and P. Quay. 1973. Vertical eddy diffusion studies in the thermocline of a small stratified lake. *J. Fish. Res. Board Can.* 30: 1491-1500.
253. Hesslein, R.H. 1976. An in situ sampler for close interval pore water studies. *Limnol. Oceanogr.* 21: 912-914.
254. Hesslein, R.H. 1980. In situ measurements of pore water diffusion coefficients using tritiated water. *Can. J. Fish. Aquat. Sci.* 37: 545-551.
255. Hesslein, R.H. 1980. Whole lake model for the distribution of sediment-derived chemical species. *Can. J. Fish. Aquat. Sci.* 37: 552-558.
256. Hesslein, R.H. 1986. Chemical processes in lakes (book review). *Can. J. Fish. Aquat. Sci.* 43: 1678.
257. Hesslein, R.H. 1987. Whole-lake metal radiotracer movement in fertilized lake basins. *Can. J. Fish. Aquat. Sci.* 44(Suppl. 1): 74-82.
258. Hesslein, R.H. 2000. Chemical fate and transport in the environment. 2nd edition (book review: Harold F. Hemond, and Elizabeth J. Fechner-Levy). *Limnol. Oceanogr.* 45: 1678.
259. Hesslein, R.H., W.S. Broecker, P.D. Quay, and D.W. Schindler. 1980. Whole-lake radiocarbon experiment in an oligotrophic lake at the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* 37:

454-463.

260. Hesslein, R.H., W.S. Broecker, and D.W. Schindler. 1980. Fates of metal radiotracers added to a whole lake. Sediment-water interactions. *Can. J. Fish. Aquat. Sci.* **37**: 378-386.
261. Hesslein, R.H., M.J. Capel, and D.E. Fox. 1988. Sulfur isotopes in sulfate in the inputs and outputs of a Canadian Shield watershed remote from sources of anthropogenic sulfate. *Biogeochem.* **5**: 263-273.
262. Hesslein, R.H., and E. Slavicek. 1984. Geochemical pathways and biological uptake of radium in small Canadian Shield lakes. *Can. J. Fish. Aquat. Sci.* **41**: 459-468.
263. Hesslein, R.H., M.A. Turner, D. Guss, and M. Lyng. 2009. Separating the effects on water chemistry of climate variation and experimental manipulation in the long-term acidification and recovery of lakes. *Can. J. Fish. Aquat. Sci.* **66**: 1864-1874.
264. Heyes, A., T.R. Moore, and J.W.M. Rudd. 1998. Mercury and methylmercury in decomposing vegetation of a pristine and impounded wetland. *J. Environ. Qual.* **27**: 591-599.
265. Heyes, A., T.R. Moore, J.W.M. Rudd, and J.J. Dugoua. 2000. Methyl mercury in pristine and impounded boreal peatlands, Experimental Lakes Area, Ontario. *Can. J. Fish. Aquat. Sci.* **57**: 2211-2222.
266. Hintelmann, H., M. Amyot, B. Flett, C.C. Gilmour, A. Heyes, J.P. Hurley, D.P. Krabbenhoft, S. Lindberg, and V.L. St. Louis. 2004. Results from the METAALICUS intercalibration program on measuring ambient and excess isotopic concentrations of HgT and MeHg in environmental samples. *RMZ-Materials and Geoenviron.* **51**: 1933-1935.
267. Hintelmann, H., R. Dillon, R.D. Evans, J.W.M. Rudd, and R.A. Bodaly. 2001. Comment: Variation in the isotope composition of mercury in a freshwater sediment sequence and food web. *Can. J. Fish. Aquat. Sci.* **58**: 2309-2311.
268. Hintelmann, H. and R. Harris. 2003. Application of multiple stable mercury isotopes to determine the adsorption and desorption dynamics of Hg(II) and MeHg to sediments. *Mar. Chem.* **90**: 165-173.
269. Hintelmann, H., R. Harris, A. Heyes, J. Hurley, C. Kelly, D. Krabbenhoft, S. Lindberg, J.W.M. Rudd, K. Scott and V. St. Louis. 2002. Reactivity and mobility of new and old mercury deposition in a boreal forest ecosystem during the first year of the METAALICUS study. *Environ. Sci. Technol.* **36**: 5034-5040. [METAALICUS contribution #2]
270. Hintelmann, H., and H.T. Nguyen. 2005. Extraction of methylmercury from tissue and plant samples using acid leaching. *Anal. Bioanal Chem.* **381**: 360-365.
271. Holoka, M.H., and S.G. Lawrence. 1987. Perturbations in zooplankton communities in a continuously flowing impoundment system incubated *in situ*. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 154-162.
272. Holoka, M.H., and R.V. Hunt. 1996. Automated addition of toxicant to a whole lake. *Can. J. Fish. Aquat. Sci.* **53**: 1871-1875.
273. Howell, E.T., M.A. Turner, R. France, and P.M. Stokes. 1990. Comparison of Zygnematacean (Chlorophyta) algae in the metaphyton of two acidic lakes. *Can. J. Fish. Aquat. Sci.* **47**: 1085-1092.
274. Huebner, J.D., D.F. Malley, and K. Donkersloot. 1990. Population ecology of the freshwater mussel *Anodonta grandis grandis* in a Precambrian Shield lake. *Can. J. Zool.* **68**: 1931-1941.

275. Hudson, J., W. Taylor and D. Schindler. 2000. Phosphate concentration in lakes. *Nature* **406**: 54-56
276. Hudson, J.J., and W.D. Taylor. 2005. Rapid estimation of phosphate at picomolar concentrations in freshwater lakes with potential application to P-limited marine systems. *Aquat. Sci.* **67**: 316-325. DOI 10.1007/s00027-005-0738-9.
277. Jackson, T.A., G. Kipphut, R.H. Hesslein, and D.W. Schindler. 1980. Experimental study of trace metal chemistry in soft-water lakes at different pH levels. *Can. J. Fish. Aquat. Sci.* **37**: 387-402.
278. Jackson, T.A., and D.W. Schindler. 1975. The biogeochemistry of phosphorus in an experimental lake environment: evidence for the formation of humic-metal-phosphate complexes. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 211-221.
279. Jansen, W., P. Geard, T. Mosindy, G. Olson, and M. Turner. 2009. Relative abundance and habitat association of three crayfish (*Orconectes virilis*, *O. rusticus*, and *O. immunis*) near an invasion front of *O. rusticus*, and long-term changes in their distribution in Lake of the Woods, Canada. *Aquatic Invasions* **4**.
280. Jansen, W., and R.H. Hesslein. 2004. Potential effects of climate warming on fish habitats in temperate zone lakes with special reference to Lake 239 of the experimental lakes area (ELA), north-western Ontario. *Environ. Biol. Fishes* **70**: 1-22.
281. Jeffries, D.S., T.A. Clair, P.J. Dillon, M. Papineau, and M.P. Stainton. 1995. Trends in surface water acidification at ecological monitoring sites in southeastern Canada (1981-1993). *Water Air Soil Pollut.* **85**: 577-582.
282. Jeffries, D.S., T.A. Clair, S. Couture, P.J. Dillon, J. Dupont, W. Keller, D.K. McNicol, M.A. Turner, R. Vet, and R. Weeber. 2003. Assessing the recovery of lakes in southeastern Canada from the effects of acidic deposition. *Ambio* **32**: 176-182.
283. Jeremiason, J.D., S.J. Eisenreich, and M.J. Paterson. 1999. Accumulation and recycling of PCBs and PAHs in artificially eutrophied Lake 227. *Can. J. Fish. Aquat. Sci.* **56**: 650-660.
284. Jeremiason, J.D. S.J. Eisenreich, M.J. Paterson, K.G. Beaty, R. Hecky, and J.J. Elser. 1999. Biogeochemical cycling of PCBs in lakes of variable trophic status: a paired-lake experiment. *Limnol. Oceanogr.* **44**: 889-902.
285. Jeziorski, A., N.D. Yan, A.M. Paterson, A.M. DeSellas, M.A. Turner, D.S. Jeffries, B. Keller, R.C. Weeber, D.K. McNicol, M.E. Palmer, K. McIver, K. Arseneau, B.K. Ginn, B.F. Cumming, and J.P. Smol. 2008. The widespread threat of calcium decline in fresh waters. *Science* **322**: 1374-1377.
286. Johnson, M.G. 1987. Trace element loadings to sediments of fourteen Ontario lakes and correlations with concentrations in fish. *Can. J. Fish. Aquat. Sci.* **44**: 3-13.
287. Johnson, M.W., R.H. Hesslein, and T.A. Dick. 2004. Host length, age, diet, parasites and stable isotopes as predictors of yellow perch (*Perca flavescens* Mitchill) trophic status in nutrient poor Canadian Shield lakes. *Environ. Biol. Fishes* **71**: 379-388.
288. Johnson, W.E., and J.R. Vallentyne. 1971. Rationale, background, and development of experimental lakes studies in northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 123-128.
289. Kalff, J. and R. Knoechel. 1978. Phytoplankton and their Dynamics in Oligotrophic and Eutrophic Lakes. *Ann. Rev. Ecol. System.* **9**: 475-495.

290. Kelly, C.A. 1988. Toward improving comparisons of alkalinity generation in lake basins. *Limnol. Oceanogr.* **33**: 1635-1636.
291. Kelly, C.A. 1989. Reply to comment by Urban and Baker. *Limnol. Oceanogr.* **34**: 1146-1148.
292. Kelly, C.A., J.A. Amaral, M.A. Turner, J.W.M. Rudd, D.W. Schindler, and M.P. Stainton. 1995. Distribution of sulfur cycling and acid neutralization in lakes at low pH. *Biogeochem.* **28**: 115-130.
293. Kelly, C.A., and D.P. Chynoweth. 1981. The contributions of temperature and of the input of organic matter in controlling rates of sediment methanogenesis. *Limnol. Oceanogr.* **26**: 891-897.
294. Kelly, C.A., E. Fee, P.S. Ramlal, J.W.M. Rudd, R.H. Hesslein, C. Anema, and E.U. Schindler. 2001. Natural variability of carbon dioxide and net epilimnetic production in the surface waters of boreal lakes of different sizes. *Limnol. Oceanogr.* **46**: 1054-1064.
295. Kelly, C.A., and J.W.M. Rudd. 1984. Epilimnetic sulfate reduction and its relationship to lake acidification. *Biogeochem.* **1**: 63-77.
296. Kelly, C.A. and J.W.M. Rudd. 1993. Fluxes of CH₄ and CO₂ to the atmosphere from hydroelectric reservoirs. *CO₂ Climate Report* **92**: 2.
297. Kelly, C.A., J.W.M. Rudd, R.A. Bodaly, N.P. Roulet, V.L. St. Louis, A. Heyes, T.R. Moore, S. Schiff, R. Aravena, K.J. Scott, B. Dyck, R. Harris, B. Warner, and G. Edwards. 1997. Increases in fluxes of greenhouse gases and methyl mercury following flooding of an experimental reservoir. *Environ. Sci. Technol.* **31**: 1334-1344.
298. Kelly, C.A., J.W.M. Rudd, R.B. Cook, and D.W. Schindler. 1982. The potential importance of bacterial processes in regulating rate of lake acidification. *Limnol. Oceanogr.* **27**: 868-882.
299. Kelly, C.A., J.W.M. Rudd, A. Furutani, and D.W. Schindler. 1984. Effects of lake acidification on rates of organic matter decomposition in sediments. *Limnol. Oceanogr.* **29**: 687-694.
300. Kelly, C.A., J.W.M. Rudd, R.H. Hesslein, D.W. Schindler, P.J. Dillon, C. Driscoll, S.A. Gherini, and R.E. Hecky. 1987. Prediction of biological and neutralization in acid-sensitive lakes. *Biogeochem.* **3**: 129-140.
301. Kelly, C.A., J.W.M. Rudd, and M.H. Holoka. 2003. The effect of pH on mercury uptake by an aquatic bacterium - implications for Hg cycling. *Environ. Sci. Technol.* **37**: 2941-2946. [METAALICUS contribution #3]
302. Kelly, C.A., J.W.M. Rudd, and D.W. Schindler. 1988. Carbon and electron flow via methanogenesis SO₄²⁻, NO₃⁻, Fe³⁺ and Mn⁴⁺ reduction in the anoxic hypolimnia of three lakes. *Ergebn. Limnol.* **31**: 333-344.
303. Kelly, C.A., J.W.M. Rudd, and D.W. Schindler. 1990. Acidification by nitric acid - future considerations. *Water Air Soil Pollut.* **50**: 49-61.
304. Kelly, C.A., J.W.M. Rudd, V.L. St. Louis, and A. Heyes. 1995. Is total mercury concentration a good predictor of methyl mercury concentration in aquatic systems? *Water Air Soil Pollut.* **80**: 715-724.
305. Kelly, C.A., J.W.M. Rudd, V.L. St. Louis, and T. Moore. 1994. Reservoir surfaces: a neglected area in greenhouse gas studies. *EOS* **75**: 332-333.
306. Kelso, J.R.M., R.F. Steedman, J.M. Gunn, K.E. Smokorowski, N.P. Lester, W.G. Cole, C.K. Minns, and K.H.

- Mills. 2001. A framework for the advancement of aquatic science - Lake habitat experiments as an example. *Aquat. Ecosys. Health* **4**: 453-461.
307. Kennedy, L.A. 1980. Teratogenesis in lake trout (*Salvelinus namaycush*), in an experimentally acidified lake. *Can. J. Fish. Aquat. Sci.* **37**: 2355-2358.
308. Kettle, W.D., M.F. Moffett, and F. deNoyelles. 1987. Vertical distribution of zooplankton in an experimentally acidified lake containing a metalimnetic phytoplankton peak. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 91-95.
309. Kidd, K.A., P.J. Blanchfield, K.H. Mills, V.P. Palace, R.E. Evans, J.M. Lazorchak, and R.W. Flick. 2007. Collapse of a fish population after exposure to a synthetic estrogen. *Proc. Nat. Acad. Sci. USA* **104**: 8897-8901.
310. Kidd, K.A., R.H. Hesslein, R.J.P. Fudge, and K.A. Hallard. 1995. The Influence of trophic level as measured by $\delta^{15}\text{N}$ on mercury concentrations in freshwater organisms. *Water Air Soil Pollut.* **80**: 1011-1015.
311. Kidd, K.A., M.J. Paterson, R.H. Hesslein, D.C.G. Muir, and R.E. Hecky. 1999. Effects of northern pike (*Esox lucius*) additions on pollutant accumulation and food web structure, as determined by $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$, in a eutrophic and an oligotrophic lake. *Can. J. Fish. Aquat. Sci.* **56**: 2193-2202.
312. Kilham, P., and R.E. Hecky. 1988. Comparative ecology of marine and freshwater phytoplankton. *Limnol. Oceanogr.* **33**: 776-795.
313. Klaverkamp, J.F., and D.A. Duncan. 1987. Acclimation to Cd toxicity by white suckers: Cd-binding capacity and metal distribution in gill and liver cytosol. *Environ. Toxicol. Chem.* **6**: 275-289.
314. Klaverkamp, J.F., D.A. Hodgins, and A. Lutz. 1983. Selenite toxicity and mercury - selenium interactions in juvenile fish. *Arch. Environ. Contam. Toxicol.* **12**: 405-413.
315. Klaverkamp, J.F., W.A. Macdonald, W.R. Lillie, and A. Lutz. 1983. Joint toxicity of selenium and mercury in salmonid eggs. *Arch. Environ. Contam. Toxicol.* **12**: 415-419.
316. Klaverkamp, J.F., M.A. Turner, S.S. Harrison, and R.H. Hesslein. 1983. Fates of metal radiotracers added to a whole lake: accumulation in slimy sculpin (*Cottus cognatus*) and white sucker (*Catostomus commersoni*). *Sci. Total Environ.* **28**: 119-128.
317. Klaverkamp, J.F., K. Wautier, and C.L. Baron. 2000. A modified mercury saturation assay for measuring metallothionein. *Aquat. Toxicol.* **50**: 13-25.
318. Klemer, A.R., L.L. Hendzel, D.L. Findlay, R.A. Hendin, M.T. Mageau, and A.E. Konopka. 1995. Carbon availability and the pattern of cyanobacterial dominance in enriched low-carbon lakes. *J. Phycol.* **31**: 735-744.
319. Kling, H.J. 1981. *Chrysochromulina laurentiana*: an electron microscopic study of a new species of Prymnesiophyceae from Canadian Shield lakes. *Nord. J. Bot.* **1**: 551-555.
320. Kling, H.J., and D.F. Findlay. 2001. Dominant scaled and non-scaled chrysophytes in Northwest Ontario Shield lakes. *Nova Hedwigia. Beiheft* **122**: 75-97.
321. Kling, H.J., D.L. Findlay, and J. Komarek. 1994. *Aphanizomenon schindlerii*: a new nostocacean cyanoprokaryote from the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **51**: 2267-2273.

322. Kling, H.J., and H. Haakansson. 1988. A light and electron microscope study of *Cyclotella* species (Bacillariophyceae) from central and northern Canadian lakes. *Diatom Res.* **3**: 55-82.
323. Kling, H.J., and J. Kristiansen. 1983. Scale-bearing Chrysophyceae (Mallomonadaceae) from central and northern Canada. *Nord. J. Bot.* **3**: 269-290.
324. Knapp, C.W., D.L. Findlay, K.A. Kidd, and D.W. Graham. 2008. A comparative assessment of molecular biological and direct microscopic techniques for assessing aquatic systems. *Environ. Monit. Assess.* **145**: 465-473.
325. Knoechel, R., and C.E. Campbell. 1987. Physical, chemical, watershed, and plankton characteristics of lakes on the Avalon Peninsula, Newfoundland, Canada: a multivariate analysis of interrelationships. *Int. Ver. theor. angew. Limnol. Verh.* **23**: 282-296.
326. Knoechel, R., and F. deNoyelles Jr. 1980. Analysis of the response of hypolimnetic phytoplankton in continuous culture to increased light or phosphorus using track autoradiography. *Can. J. Fish. Aquat. Sci.* **37**: 434-441.
327. Kullman, M.A., K.A. Kidd, C.L. Podemski, M.J. Paterson, and P.J. Blanchfield. 2009. Assimilation of freshwater salmonid aquaculture waste by native aquatic biota. *Can. J. Fish. Aquat. Sci.* **66**: 1965-1975.
328. Kullman, M.A., C.L. Podemski, and K.A. Kidd. 2007. A sediment bioassay to assess the effects of aquaculture waste on growth, reproduction, and survival of *Sphaerium simile* (Say) (Bivalvia: Sphaeriidae). *Aquaculture* **266**: 144-152.
329. Laird, K.R. and B.F. Cumming. 2008. Diatom-inferred lake level from near-shore cores in a drainage lake in the Experimental Lakes Area, northwestern Ontario, Canada. *J. Paleolimnol.* **42**: 65-80
330. Laird, K.R. and B.F. Cumming. 2008. Reconstruction of Holocene lake level from diatoms, chrysophytes and organic matter in a drainage lake from the Experimental Lakes Area (northwestern Ontario, Canada). *Quat. Res.* **69**: 292-305.
331. Lalonde, J.D., M. Amyot, M-R. Doyon, and J-C. Auclair. 2003. Photo-induced Hg(II) reduction in snow from the remote and temperate Experimental Lakes Area (Ontario, Canada). *J. Geophys. Res.* **108**, No. D6, 4200, doi: 10.1029/2001JD001534. [METAALICUS contribution #4]
332. Lamontagne, S. 1998. Nitrogen mineralization in upland Precambrian Shield catchments: Contrasting the role of lichen-covered bedrock and forested areas. *Biogeochem.* **41**: 53-69.
333. Lamontagne, S. and S.L. Schiff. 2000. Response of soil microorganisms to an elevated nitrate input in an open *Pinus banksiana* — *Cladina* forest. *Forest Ecol. Manag.* **137**: 13-22.
334. Lamontagne, S., and S.L. Schiff. 1999. The response of a heterogeneous upland Boreal Shield catchment to a short term NO₃⁻ addition. *Ecosystems* **2**: 460-473.
335. Lamontagne, S., S.L. Schiff, and R.W. Bachmann. 1995. Impact of experimentally elevated nitrogen deposition on a boreal forest catchment. *Lake Reservoir Manag.* **11**: 158-159 (Summary only).
336. Lamontagne, S., S.L. Schiff, and R.J. Elgood. 2000. Recovery of ¹⁵N-labelled nitrate to a small upland boreal forest catchment. *Can. J. For. Res.* **30**: 1165-1177.
337. Lawrence, S.G., and M.H. Holoka. 1987. Effects of low concentrations of cadmium on the crustacean

- zooplankton community of an artificially acidified lake. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 163-172.
338. Lawrence, S.G., and M.H. Holoka. 1991. Response of crustacean zooplankton *in situ* to cadmium at low environmental concentrations. *Int. Ver. theor. angew. Limnol. Verh.* **24**: 2254-2259.
339. Lawrence, S.G., M.H. M. H. Holoka, and R.D. Hamilton. 1989. Effects of cadmium on a microbial food chain, *Chlamydomonas reinhardtii* and *Tetrahymena vorax*. *Sci. Total Environ.* **87-88**: 381-395.
340. Lawrence, S.G., M.H. Holoka, R.V. Hunt, and R.H. Hesslein. 1996. Multi-year experimental additions of cadmium to a lake epilimnion and resulting water column cadmium concentrations. *Can. J. Fish. Aquat. Sci.* **53**: 1876-1887.
341. Lawrence, S.G., D.F. Malley, W.J. Findlay, M.A. MacIver, and I.L. Delbaere. 1987. Method for estimating dry weight of freshwater planktonic crustaceans from measures of length and shape. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 264-274.
342. Lean, D.R.S. 1973. Movements of phosphorus between its biologically important forms in lake water. *J. Fish. Res. Board Can.* **30**: 1525-1636.
343. Leavesley, G.H., K. Turner, D. D'Agnes, and D. McKnight. 1997. Regional delineation of North America for the assessment of freshwater ecosystems and climate change. *Hydrol. Process.* **11**: 819-824.
344. Leavitt, P.R., and D.L. Findlay. 1994. Comparison of fossil pigments with 20 years of phytoplankton data from eutrophic Lake 227, Experimental Lakes Area, Ontario. *Can. J. Fish. Aquat. Sci.* **51**: 2286-2299.
345. Leavitt, P.R., D.L. Findlay, R.I. Hall, D.W. Schindler, and J.P. Smol. 1999. Algal responses to dissolved organic carbon loss and pH decline during whole-lake acidification: evidence from paleolimnology. *Limnol. Oceanogr.* **44**: 757-773.
346. Leavitt, P.R., B.J. Hann, J.P. Smol, B.A. Zeeb, C.E. Christie, B. Wolfe, and H.J. Kling. 1994. Paleolimnological analysis of whole-lake experiments: an overview of results from Experimental Lakes Area 227. *Can. J. Fish. Aquat. Sci.* **51**: 2322-2332.
347. Leavitt, P.R., R.D. Vinebrooke, D.B. Donald, J.P. Smol, and D.W. Schindler. 1997. Past ultraviolet radiation environments in lakes derived from fossil pigments. *Nature* **388**: 457-459.
348. Lehnerr, I. and V.L. St.Louis. 2009. Importance of ultraviolet radiation in the photodemethylation of methylmercury in freshwater ecosystems. *Environ. Sci. Technol.* **43**: 5692-5698.
349. Leino, R.L., P. Wilkinson, and J.G. Anderson. 1987. Histopathological changes in the gills of pearl dace, *Semotilus margarita*, and fathead minnows, *Pimephales promelas*, from experimentally acidified Canadian lakes. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 126-134.
350. Lepine, L., and A. Chamberland. 1995. Field sampling and analytical intercomparison for mercury and methylmercury determination in natural water. *Water Air Soil Pollut.* **80**: 1247-1256.
351. Lerman, A., and G.J. Brunskill. 1971. Migration of major constituents from lake sediments into lake water and its bearing on lake water composition. *Limnol. Oceanogr.* **16**: 888-890.
352. Levine, S.N. 1975. Orthophosphate concentration and flux within the epilimnia of two Canadian Shield Lakes. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 624-629.
353. Levine, S.N., and D.W. Schindler. 1980. Radiochemical analysis of orthophosphate concentrations and

- seasonal changes in the flux of orthophosphate to seston in two Canadian Shield lakes. *Can. J. Fish. Aquat. Sci.* **37**: 479-487.
354. Levine, S.N., and D.W. Schindler. 1989. Phosphorus, nitrogen, and carbon dynamics of Lake 303 during recovery from eutrophication. *Can. J. Fish. Aquat. Sci.* **46**: 2-10.
355. Levine, S.N., and D.W. Schindler. 1992. Modification of the N:P ratio in lakes by *in situ* processes. *Limnol. Oceanogr.* **37**: 917-935.
356. Levine, S.N., and D.W. Schindler. 1999. Influence of nitrogen to phosphorus supply ratios and physicochemical conditions on cyanobacteria and phytoplankton species composition in the Experimental Lakes Area, Canada. *Can. J. Fish. Aquat. Sci.* **56**: 451-466.
357. Levine, S.N., M.P. Stainton, and D.W. Schindler. 1986. A radiotracer study of phosphorus cycling in a eutrophic Canadian Shield lake, Lake 227, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **43**: 366-378.
358. Libosvsky, J. 1976. Deriving the age structure of fish from gill-net catches. *Zoologicke Listy.* **25**: 251-263.
359. Linsey, G.A., D.W. Schindler, and M.P. Stainton. 1987. Atmospheric deposition of nutrients and major ions at the Experimental Lakes Area in northwestern Ontario, 1970-1982. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 206-214.
360. Lockhart, W.L., R.W. Macdonald, P.M. Outridge, P. Wilkinson, J.B. DeLaronde, and J.W.M. Rudd. 2000. Tests of the fidelity of lake sediment core records of mercury deposition to known histories of mercury contamination. *Sci. Total Environ.* **260**: 171-180.
361. Lockhart, W.L., P. Wilkinson, B. N. Billeck, R.A. Danell, R.V. Hunt, G. Brunskill, J. Delaronde, and V. St. Louis. 1998. Fluxes of mercury to lake sediments in central and northern Canada inferred from dated sediment cores. *Biogeochem.* **40**: 163-173.
362. Lockhart, W.L., P. Wilkinson, B.N. Billeck, G.J. Brunskill, R.V. Hunt, and R. Wagemann. 1993. Polycyclic aromatic hydrocarbons and mercury in sediments from two isolated lakes in central and northern Canada. *Wat. Sci. Tech.* **28**: 43-52.
363. Lockhart, W.L., P. Wilkinson, B.N. Billeck, R.V. Hunt, R. Wagemann, and G.J. Brunskill. 1995. Current and historical inputs of mercury to high-latitude lakes in Canada and to Hudson Bay. *Water Air Soil Pollut.* **80**: 603-610.
364. Lonergan, S.P., and J.B. Rasmussen. 1996. A multi-taxonomic indicator of acidification: isolating the effects of pH from other water-chemistry variables. *Can. J. Fish. Aquat. Sci.* **53**: 1778-1787.
365. MacKay, N.A., and J.J. Elser. 1998. Factors potentially preventing trophic cascades: food quality, invertebrate predation, and their interaction. *Limnol. Oceanogr.* **43**: 339-347.
366. MacKay, N.A. and J.J. Elser. 1998. Nutrient recycling by *Daphnia* reduces N₂ fixation by cyanobacteria. *Limnol. Oceanogr.* **43**: 347-354.
367. Magnuson, J.J., K.E. Webster, R.A. Assel, C.J. Bowser, P.J. Dillon, J.G. Eaton, H.E. Evans, E.J. Fee, R.I. Hall, L.R. Mortsch, D.W. Schindler and F.H. Quinn. 1997. Potential effects of climate changes on aquatic systems: Laurentian Great Lakes and Precambrian Shield region. *Hydrol. Proc.* **11**: 825-871.

368. Mailman, M., and R.A. Bodaly. 2006. Strategies to lower methyl mercury concentrations in hydroelectric reservoirs and lakes: A review. *Sci. Total Environ.* **368**: 224-235.
369. Mailman, M., and R.A. Bodaly. 2005. Total mercury, methyl mercury, and carbon in fresh and burned plants and soil in northwestern Ontario. *Environ. Pollut.* **138**: 161-166. doi:10.1016/j.envpol.2005.02.005.
370. Majewski, A.R., P.J. Blanchfield, V.P. Palace, and K. Wautier. 2002. Waterborne 17 α -ethynylestradiol affects aggressive behaviour of male fathead minnows (*Pimephales promelas*) under artificial spawning conditions. *Can. J. Water Qual. Res.* **37**: 697-710.
371. Makino, W., J. Urabe, J.J. Elser, and C. Yoshimizu. 2002. Evidence of phosphorus-limited individual and population growth of *Daphnia* in a Canadian Shield lake. *Oikos* **96**: 197-205.
372. Malley, D.F. 1980. Book review of Biology of Intertidal Animals, 3rd Edition. R.C. Newell 1979. *Can. J. Fish. Aquat. Sci.* **37**: 905.
373. Malley, D.F. 1980. Decreased survival and calcium uptake by the crayfish, *Orconectes virilis*, in low pH. *Can. J. Fish. Aquat. Sci.* **37**: 364-372.
374. Malley, D.F. 1996. Cadmium whole lake experiment at the Experimental Lakes Area: an anachronism? *Can. J. Fish. Aquat. Sci.* **53**: 1862-1870.
375. Malley, D.F. 1996. Transplantation of unionid mussels: A powerful biomonitoring technique when used judiciously. *Learned Discourses. SETAC News* **16**: 23-24.
376. Malley, D.F. 1998. Near-infrared spectroscopy as a potential method for routine sediment analysis to improve rapidity and efficiency. *Water Sci. Technol.* **37**: 181-188.
377. Malley, D.F., and P.S.S. Chang. 1985. Effects of aluminum and acid on calcium uptake by the crayfish, *Orconectes virilis*. *Arch. Environ. Contam. Toxicol.* **14**: 739-747.
378. Malley, D.F., and P.S.S. Chang. 1986. Increase in the abundance of Cladocera at pH 5.1 in experimentally-acidified Lake 223, Experimental Lakes Area, Ontario. *Water Air Soil Pollut.* **30**: 629-638.
379. Malley, D.F., and P.S.S. Chang. 1991. Early observations on the zooplankton community of a Precambrian Shield lake receiving experimental additions of cadmium. *Int. Ver. theor. angew. Limnol. Verh.* **24**: 2248-2253.
380. Malley, D.F., and P.S.S. Chang. 1994. Assessing the health of a zooplankton community in a small Precambrian Shield lake during recovery from experimental acidification. *J. Aquat. Ecosystem Health* **3**: 273-286.
381. Malley, D.F., P.S.S. Chang, D.L. Findlay, and G.A. Linsey. 1988. Extreme perturbation of the zooplankton community of a small Precambrian Shield lake by the addition of nutrients. *Int. Ver. theor. angew. Limnol. Verh.* **23**: 2237-2247.
382. Malley, D.F., P.S.S. Chang, and R.H. Hesslein. 1989. Whole lake additions of ¹⁰⁹Cd: Radiotracer accumulation in the muscle population in the first season. *Sci. Total Environ.* **87/88**: 397-417.
383. Malley, D.F., J.D. Huebner, and K. Donkersloot. 1988. Effects on ionic composition of blood and tissues of *Anodonta grandis grandis* (Bivalvia) of an addition of aluminum and acid to a lake. *Arch. Environ. Contam. Toxicol.* **17**: 479-491.

384. Malley, D.F., J.F. Klaverkamp, S.B. Brown, and P.S.S. Chang. 1993. Increase in metallothionein in freshwater mussels *Anodonta grandis grandis* exposed to cadmium in the laboratory and the field. *Water Poll. Res. J. Can.* **28**: 253-273.
385. Malley, D.F., S.G. Lawrence, M.H. Holoka, and P.C. Williams. 1996. Applying near-infrared reflectance spectroscopy to predict carbon, nitrogen, phosphorus and organic-bound cadmium in lake picoplankton. *J. Aquat. Ecosystem Health* **5**: 135-147.
386. Malley, D.F., and K.H. Mills. 1992. Whole-lake experimentation as a tool to assess ecosystem health, response to stress and recovery: the Experimental Lakes Area experience. *J. Aquat. Ecosystem Health* **1**:159-174.
387. Malley, D.F., and M. Nilsson. 1995. Environmental applications of near infrared spectroscopy: Seeing the environment in a different light. *Spectroscopy Europe* **7**: 8-16.
388. Malley, D.F., and J.B. Reynolds. 1979. Sampling strategies and life history of non-insectan freshwater invertebrates. *J. Fish. Res. Board Can.* **36**: 311-318.
389. Malley, D.F., H. Ronicke, D.L. Findlay, and B. Zippel. 1999. Feasibility of using near-infrared reflectance spectroscopy for the analysis of C, N, P, and diatoms in lake sediments. *J. Paleolimnol.* **21**: 295-306.
390. Malley, D.F., A.R. Stewart, and B.D. Hall. 1996. Uptake of methyl mercury by the floater mussel, *Pyganodon grandis* (Bivalvia, Unionidae) caged in a flooded wetland. *Environ. Toxicol. Chem.* **15**: 928-936.
391. Malley, D.F., and P.C. Williams. 1997. Use of near-infrared reflectance spectroscopy in prediction of heavy metals in freshwater sediment by their association with organic matter. *Environ. Sci. Technol.* **31**: 3461-3467.
392. Malley, D.F., P.C. Williams, M.P. Stainton, and B.W. Hauser. 1993. Application of near-infrared reflectance spectroscopy for the measurement of carbon, nitrogen and phosphorus in seston from oligotrophic lakes. *Can. J. Fish. Aquat. Sci.* **50**: 1779-1785.
393. Marshall, .S. 1978. Population dynamics of *Daphnia galeata mendotae* as modified by chronic cadmium stress. *J. Fish. Res. Board Can.* **35**: 461-469.
394. Marshall, T.R., and P.A. Ryan. 1987. Abundance patterns and community attributes of fishes relative to environmental gradients. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 2): 198-215.
395. Malley, D.F., P.C. Williams, and M.P. Stainton. 1996. Rapid measurement of suspended C, N, and P from Precambrian Shield lakes using near-infrared reflectance spectroscopy. *Water Res.* **30**: 1325-1332.
396. Marshall, J.S., and D.L. Mellinger. 1980. Dynamics of cadmium-stressed plankton communities. *Can. J. Fish. Aquat. Sci.* **37**: 403-414.
397. Marshall, J.S., J.I. Parker, D.L. Mellinger, and S.G. Lawrence. 1981. An *in situ* study of cadmium and mercury stress in the plankton community of Lake 382, Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **38**: 1209-1214.
398. Mason, R.P., M.L. Abbott, R.A. Bodaly, O.R. Bullock, Jr., C.T. Driscoll, D. Evers, S.E. Lindberg, M. Murray, and E.B. Swain. 2005. Monitoring the response to changing mercury deposition. *Environ. Sci. Technol.* **39**: 15A-22A.
399. Matthews, C.J.D., E.M. Joyce, V.L. St. Louis, S.L. Schiff, J.J. Venkiteswaren, B.D. Hall, R.A. Bodaly, and

- K.G. Beaty. 2005. Carbon dioxide and methane production in small reservoirs flooding upland boreal forest. *Ecosystems* **8**: 267-285.
400. Matthews, C.J.D., V.L. St.Louis, and R.H. Hesslein. 2003. Comparison of three techniques used to measure diffusive gas exchange from sheltered aquatic surfaces. *Environ. Sci. Technol.* **37**: 772-780.
401. Mathias, J.A, and J. Barica. 1980. Factors controlling oxygen depletion in ice-covered lakes. *Can. J. Fish. Aquat. Sci.* **37**: 185-194.
402. McAndrews, J.H. 1982. Holocene environment of a fossil bison from Kenora, Ontario. *Ontario Archaeology* **37**: 41-51.
403. McKenzie, C., S. Schiff, R. Aravena, C. Kelly, and V. St. Louis. 1998. Effect of temperature on production of CH₄ and CO₂ from peat in a natural and a flooded Boreal forest wetland. *Clim. Change* **40**: 247-266.
404. Miller, C.M., C.C. Gilmour, A. Heyes, and R.P. Mason. 2007. Influence of dissolved organic matter on the complexation of Hg under sulfidic conditions. *Environ. Toxicol. Chem.* **26**: 624-633.
405. Mills, K.H. 1985. Responses of Lake Whitefish (*Coregonus clupeaformis*) to fertilization of Lake 226, the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **42**: 129-138.
406. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 1992. Effects of acidification on lake whitefish (*Coregonus clupeaformis*). *Pol. Arch. Hydrobiol.* **39**: 423-430.
407. Mills, K.H., and R.J. Beamish. 1980. A comparison of fin-ray and scale determinations for lake whitefish (*Coregonus clupeaformis*) and implications for estimates of growth and animal survivors. *Can. J. Fish. Aquat. Sci.* **37**: 534-544.
408. Mills, K.H., and S.M. Chalanchuk. 1988. Population dynamics of unexploited lake whitefish (*Coregonus clupeaformis*) in one experimentally fertilized lake and three exploited lakes. *Finn. Fish. Res.* **9**: 145-153.
409. Mills, K.H., and S.M. Chalanchuk. 1987. Population dynamics of lake whitefish (*Coregonus clupeaformis*) during and after the fertilization of Lake, the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 55-63.
410. Mills, K.H., and S.M. Chalanchuk. 2004. The fin-ray method of aging lake whitefish. *Ann. Zool. Fennici* **41**: 215-223.
411. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 1992. Effects of acidification on lake whitefish (*Coregonus clupeaformis*). *Pol. Arch. Hydrobiol.* **39**: 423-430.
412. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2000. Recovery of fish populations in Lake 223 from experimental acidification. *Can. J. Fish. Aquat. Sci.* **57**: 192-204.
413. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2002. Abundance, annual survival, and recruitment of unexploited and exploited lake charr (*Salvelinus namaycush*) populations at the Experimental Lakes Area, northwestern Ontario. *Environ. Biol. Fish.* **64**: 281-292.
414. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2002. Biomass and production of lake charr during the acidification and pH recovery of a small Ontario Lake. *Environ. Biol. Fish.* **64**: 293-301.
415. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2002. Abundance, survival, condition, and recruitment of unexploited lake whitefish (*Coregonis clupeaformis*) in a lake subjected to winter drawdown. *Arch.*

- Hydrobiol. Spec. Issues Advanc. Limnol.* **57**: 209-219.
416. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2007. Long-term impacts of acidification and nutrient additions on a lake whitefish population. *Advances in Limnology* **60**: 503-513.
417. Mills, K.H., S.M. Chalanchuk, D.J. Allan, and L.C. Mohr. 1995. Responses of lake whitefish (*Coregonus clupeaformis*) to exploitation at the Experimental Lakes Area, northwestern Ontario. *Arch. Hydrobiol. Spec. Issues Advanc. Limnol.* **46**: 361-368.
418. Mills, K.H., S.M. Chalanchuk, D.L. Findlay, D.J. Allan, and B.R. McCulloch. 2002. Condition, recruitment, and abundance of lake whitefish (*Coregonus clupeaformis*) in a fertilized acid lake. *Arch. Hydrobiol. Spec. Issues Advanc. Limnol.* **57**: 423-433.
419. Mills, K.H., S.M. Chalanchuk, L.C. Mohr, and I.J. Davies. 1987. Responses of fish populations in lake 223 to 8 years of experimental acidification. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 114-125.
420. Mills, K.H., E.C. Gyselman, S.M. Chalanchuk, and D.J. Allan. 2004. Growth, annual survival, age and length frequencies for unexploited lake whitefish populations. *Ann. Zool. Fennici* **41**: 263-270.
421. Mills, K.H., B.R. McCulloch, S.M. Chalanchuk, D.J. Allan, and M.P. Stainton. 1998. Growth, size structure, and annual survival of lake whitefish (*Coregonus clupeaformis*) during the eutrophication and oligotrophication of Lake 226, the Experimental Lakes Area, Canada. *Arch. Hydrobiol. Spec. Issues Advanc. Limnol.* **50**: 151-160.
422. Mills, K.H., and D.W. Schindler. 1986. Biological indicators of lake acidification. *Water Air Soil Pollut.* **30**: 779-789.
423. Mills, K.H., and D.W. Schindler. 1987. Preface. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 3-5.
424. Minns, C.K., J.E. Moore, D.W. Schindler, and M.L. Jones. 1990. Assessing the potential extent of danger to inland lakes in eastern Canada due to acidic deposition. III. Predicted impacts on species richness in seven groups of aquatic biota. *Can. J. Fish. Aquat. Sci.* **47**: 821-830.
425. Miskimmon, B.M. 1991. Effect of natural levels of dissolved organic carbon (DOC) on methyl mercury formation and sediment-water partitioning. *Bull. Environ. Contam. Toxicol.* **47**: 743-750.
426. Miskimmon, B.M., J.W.M. Rudd, and C.A. Kelly. 1992. The influence of dissolved organic carbon, pH and microbial respiration rates on mercury methylation and demethylation in lake water. *Can. J. Fish. Aquat. Sci.* **49**: 17-22.
427. Mitchell, C.P.J., and B.A. Branfireun. 2005. Hydrogeomorphic controls on reduction-oxidation conditions across Boreal upland-peatland interfaces. *Ecosystems* **8**: 731-747.
428. Mitchell, C.P.J., B.A. Branfireun, and R.K. Kolka. 2008. Spatial characteristics of net methylmercury production hot spots in peatlands. *Environ. Sci. Technol.* **42**: 1010-1016.
429. Mohr, L.C., and S. Chalanchuk. 1985. The effect of pH on sperm motility of white sucker (*Catostomus commersoni*) in the Experimental Lakes Area. *Environ. Biol. Fishes* **14**: 309-314.
430. Mohr, L.C., K.H. Mills, and J.F. Klaverkamp. 1990. Survival and development of lake trout (*Salvelinus namaycush*) embryos in an acidified lake in northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **47**: 236-243.
431. Molot, L. A., and P. J. Dillon. 2003. Variation in iron, aluminum and dissolved organic carbon mass transfer

- coefficients in lakes. *Water Res.* **37**: 1759-1768.
432. Molot, L.A., G.Li, D.L. Findlay, and S.B. Watson. 2010. Iron-mediated suppression of bloom-forming cyanobacteria by oxine in a eutrophic lake. *Freshwater Biology* **55**: 1102-1117.
433. Moore, T.R., J.L. Bubier, A. Heyes, and R.J. Flett. 1995. Methyl and total mercury in boreal wetland plants, Experimental Lakes Area, northwestern Ontario. *J. Environ. Qual.* **24**: 845-850.
434. Moore, T.R.; L. Matos, and N.T. Roulet. 2003. Dynamics and chemistry of dissolved organic carbon in Precambrian Shield catchments and an impounded wetland. *Can. J. Fish. Aquat. Sci.* **60**: 612-623.
435. Moos, M.T., K.R. Laird, and B.F. Cumming. 2005. Diatom assemblages and water depth in Lake 239 (Experimental Lakes Area, Ontario): Implications for paleoclimatic studies. *J. Paleolimnol.* **34**: 217-227.
436. Moos, M.T., K.R. Laird, and B.F. Cumming. 2009. Climate-related eutrophication of a small boreal lake in northwestern Ontario: a palaeolimnological perspective. *The Holocene* **19**: 359-367.
437. Muir, D.C.G., C.A. Ford, N.P. Grift, D.A. Metner, and W.L. Lockhart. 1990. Geographic variation of chlorinated hydrocarbons in burbot (*Lota lota*) from remote lakes and rivers in Canada. *Arch. Environ. Contam. Toxicol.* **19**: 530-542.
438. Muir, D.C.G., N.P. Grift, W.L. Lockhart, P. Wilkinson, B.N. Billeck, and G.J. Brunskill. 1995. Spatial trends and historical profiles of organochlorine pesticides in Arctic lake sediments. *Sci. Total Environ.* **160-161**: 447-457.
439. Muir, D.C.G., A. Omelchenko, N.P. Grift, D.A. Savoie, W.L. Lockhart, P. Wilkinson, and G.J. Brunskill. 1996. Spatial trends and historical deposition of polychlorinated biphenyls in Canadian midlatitude and Arctic lake sediments. *Environ. Sci. Technol.* **30**: 3609-3617.
440. Müller, P. 1980. Effects of artificial acidification on the growth of epilithiphyton. *Can. J. Fish. Aquat. Sci.* **37**: 355-363.
441. Nalewajko, C., and D.W. Schindler. 1976. Primary production, extracellular release and heterotrophy in two lakes in the ELA, northwestern Ontario. *J. Fish. Res. Board Can.* **33**: 219-226.
442. Nero, R.W., and I.J. Davies. 1982. Comparison of two sampling methods for estimating the abundance and distribution of *Mysis relicta*. *Can. J. Fish. Aquat. Sci.* **39**: 349-355.
443. Nero, R.W., and D.W. Schindler. 1983. The decline of *Mysis relicta* during the acidification of Lake 223. *Can. J. Fish. Aquat. Sci.* **40**: 1905-1911.
444. Newbury, R.W., and K.G. Beaty. 1980. Water renewal efficiency of watershed and lake combinations in the ELA region of the Precambrian Shield. *Can. J. Fish. Aquat. Sci.* **37**: 335-341.
445. Noël, D., J.-J. Hechler, and H. Roberge. 1989. Performance of sulfation and nitration plates used to monitor atmospheric pollutant deposition in a real environment. *Atmos. Environ.* **23**: 603-609.
446. Nurnberg, G.K. 1996. Comment: Phosphorus budgets and stoichiometry during the open-water season in two unmanipulated lakes in the Experimental Lakes Area, northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **53**: 1469-1471.

447. Oelbermann, M. and S.L. Schiff. 2010. The Redistribution of Soil Organic Carbon and Nitrogen and Greenhouse Gas Production Rates during Reservoir Drawdown and Reflooding. *Soil Science* **175**: 72-80.
448. Oelbermann, M. and S.L. Schiff. 2010. Inundating Contrasting Boreal Forest Soils: CO₂ and CH₄ Production Rates. *Ecoscience* **17**: 216-224.
449. Ogrinc, N., H. Hintelmann, C. Eckley, and S. Lojen. 2003. Biogeochemical influence on carbon isotope signature in boreal lake sediments. *Hydrobiologia* **494**: 207-213.
450. Ohle, W. 1977. Experimental Lakes Area and Canadian limnology. *Arch. Hydrobiol.* **79**: 274-280.
451. Orihel, D.M., M.J. Paterson, P.J. Blanchfield, R.A. Bodaly, C.C. Gilmour, and H.H. Hintelmann. 2008. Temporal changes in the distribution, methylation, and bioaccumulation of newly deposited mercury in an aquatic ecosystem. *Environ. Pollut.* **154**: 77-88.
452. Orihel, D.M., M.J. Paterson, C.C. Gilmour, R.A. Bodaly, P.J. Blanchfield, H.H. Hintelmann, R.C. Harris, and J.W.M. Rudd. 2006. Effect of loading rate on the fate of mercury in littoral mesocosms. *Environ. Sci. Technol.* **40**: 5992-6000.
453. Orihel, D.M., M.J. Paterson, P.J. Blanchfield, R.A. Bodaly, and H. Hintelmann. 2007. Experimental evidence of a linear relationship between inorganic mercury loading and methylmercury accumulation by aquatic biota. *Environ. Sci. Technol.* **41**: 4952-4958.
454. Palace V.P., R.E. Evans, K.G. Wautier, K.H. Mills, P.J. Blanchfield, B.J. Park, C.L. Baron, and K. A. Kidd. 2009. Interspecies differences in biochemical, histopathological, and population responses in four wild fish species exposed to ethynylestradiol added to a whole lake. *Can. J. Fish. Aquat. Sci.* **66**: 1920-1935.
455. Palace, V., R.E. Evans, K. Wautier, L. Vandenbyllaardt, W. Vandersteen, and K. Kidd. 2002. Induction of vitellogenin and histological effects in wild fathead minnows from a lake experimentally treated with the synthetic estrogen, ethynylestradiol. *Can. J. Water Qual. Res.* **37**: 637-650.
456. Palace, V.P., and J.F. Klaverkamp. 1993. Variation of hepatic enzymes in three species of freshwater fish from Precambrian Shield lakes and the effect of cadmium exposure. *Comp. Biochem. Physiol.* **104C**: 147-154.
457. Palace, V.P., K. Wautier, R.E. Evans, C.L. Baron, J. Werner, C.R. Ranson, J.F. Klaverkamp, and K. Kidd. 2001. Effects of 17- β estradiol exposure on metallothionein and fat soluble antioxidant vitamins in juvenile lake trout (*Salvelinus namaycush*). *Bull. Environ. Contam. Toxicol.* **66**: 591-596.
458. Palace, V.P., K.G. Wautier, R.E. Evans; P.J. Blanchfield; K.H. Mills, S.M. Chalanchuk, D. Godard, M.E. McMaster, G.R. Tetreault, L.E. Peters, L. Vandenbyllaardt, and K.A. Kidd. 2006. Biochemical and Histopathological effects in pearl dace (*Margariscus margarita*) chronically exposed to a synthetic estrogen in a whole lake experiment. *Environ. Toxicol. Chem.* **25**: 1114-1125.
459. Park, B.J., and K. Kidd. 2005. Effects of the synthetic estrogen ethynylestradiol on early life stages of mink frogs and green frogs in the wild and *in situ*. *Environ. Toxicol. Chem.* **24**: 2027-2036.
460. Parker, B.R., D.W. Schindler, K.G. Beaty, M.P. Stainton, and S.E.M. Kasian. 2009. Long-term changes in climate, streamflow, and nutrient budgets for first-order catchments at the Experimental Lakes Area (Ontario, Canada). *Can. J. Fish. Aquat. Sci.* **66**: 1848-1863.
461. Patalas, K. 1971. Crustacean plankton communities in forty-five lakes in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 231-244.

462. Patalas, K. 1980. Comment on 'A relation between lake morphometry and primary productivity and its use in interpreting whole-lake eutrophication experiments' (E.J. Fee). *Limnol. Oceanogr.* **25**: 1147-1149.
463. Patalas, K., and A. Salki. 1993. Horizontal distribution of crustacean plankton in lakes of different size. *Can. J. Fish. Aquat. Sci.* **50**: 2626-2640.
464. Paterson, A.M., B.F. Cumming, J.P. Smol, J.M. Blais, and R.L. France. 1998. Assessment of the effects of logging, forest fires and drought on lakes in northwestern Ontario: a 30-year paleolimnological perspective. *Can. J. For. Res.* **28**: 1546 – 1556.
465. Paterson, M.J., P.J. Blanchfield, C. Podemski, H.H. Hintelmann, C.C. Gilmour, R. Harris, N. Ogrinc, J.W.M. Rudd, and K.A. Sandilands. 2006. Bioaccumulation of newly-deposited mercury by fish and invertebrates: An enclosure study using stable mercury isotopes. *Can. J. Fish. Aquat. Sci.* **63**: 2213-2224.
466. Paterson, M.J., D.L. Findlay, K. Beaty, W. Findlay, L.L. Hendzel, E.U. Schindler, M.P. Stainton, and G.K. McCullough. 1997. Changes in the planktonic food web of a new experimental reservoir. *Can. J. Fish. Aquat. Sci.* **54**: 1088-1102.
467. Paterson, M.J., D.L. Findlay, A.G. Salki, L.L. Hendzel, and R.H. Hesslein. 2002. The effects of *Daphnia* on nutrient stoichiometry and filamentous cyanobacteria: a mesocosm experiment in a eutrophied lake. *Freshw. Biol.* **47**: 1217-1233.
468. Paterson, M.J., D.C.G. Muir, B. Rosenberg, E.J. Fee, C. Anema, and W. Franzin. 1998. Does lake size affect concentrations of atmospherically-derived PCBs in water, sediment, zooplankton, and fish? *Can. J. Fish. Aquat. Sci.* **55**: 544-553.
469. Paterson, M.J., C.L. Podemski, W.J. Findlay, D.L. Findlay, and A.G. Salki. 2010. The response of zooplankton in a whole-lake experiment on the effects of a cage aquaculture operation for rainbow trout (*Oncorhynchus mykiss*). *Can. J. Fish. Aquat. Sci.* **67**: 1852-1861.
470. Paterson, M.J., C.L. Podemski, L.J. Wesson, and A.P. Dupuis. 2011. The effects of an experimental freshwater cage aquaculture operation on *Mysis diluviana*. *J. Plankton Res.* **33**: 25-36.
471. Paterson, M.J., J.W.M. Rudd, and V. St. Louis. 1998. Increases in total and methylmercury in zooplankton following flooding of a peatland reservoir. *Environ. Sci. Technol.* **32**: 3868-3874.
472. Paterson, M.J., D.W. Schindler, R.E. Hecky, D.L. Findlay, and K.J. Rondeau. 2011. Comment: Lake 227 shows clearly that controlling inputs of nitrogen will not reduce or prevent eutrophication of lakes. *Limnology and Oceanography* **56**: 1545-1547.
473. Peterson, M., S. Lindberg, G. Southworth, M. Bogle, and J. Graydon. 2004. Investigating mercury re-emission from boreal uplands and wetlands: Latest results from the Experimental Lakes Area, Canada. *RMZ- Materials and Geoenviron.* **51**: 1710-1713.
474. Phillips, I.D., R.D. Vinebrooke, and M.A. Turner. 2009. Experimental reintroduction of the crayfish species *Orconectes virilis* into formerly acidified Lake 302S (Experimental Lakes Area, Canada). *Can. J. Fish. Aquat. Sci.* **66**: 1892-1902.
475. Phillips, I.D., R.D. Vinebrooke, and M.A. Turner. 2009. Ecosystem consequences of potential range expansions of *Orconectes virilis* and *Orconectes rusticus* crayfish in Canada - a review. *Environ. Rev.* **17**: 235-248.

476. Planas, D., and R.E. Hecky. 1984. Comparison of phosphorus turnover times in northern Manitoba reservoirs with lakes of the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **41**: 605-612.
477. Planas, D., and A. Lamarche. 1983. Lack of effect of arsenic on phytoplankton communities in different nutrient conditions. *Can. J. Fish. Aquat. Sci.* **40**: 156-161.
478. Playle, R.C. 1987. Methods and feasibility of using aluminium-26 as a biological tracer in low pH waters. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 260-263.
479. Playle, R.C. 1987. Chemical effects of spring and summer alum additions to a small, northwestern Ontario lake. *Water Air Soil Pollut.* **34**: 207-225.
480. Plumb, J.M., and P.J. Blanchfield. 2009. Performance of temperature and dissolved oxygen criteria to predict habitat use by lake trout (*Salvelinus namaycush*). *Can. J. Fish. Aquat. Sci.* **66**: 2011-2023.
481. Poulain, A. J., M. Amyot, D. Findlay, S. Telor, T. Barkay, and H. Hintelmann. 2004. Biological and photochemical production of dissolved gaseous mercury in a boreal lake. *Limnol. Oceanogr.* **49**: 2265-2275.
482. Poulain, A.J., D.M. Orihel, M. Amyot, M.J. Paterson, H. Hintelmann, and G.R. Southworth. 2006. Relationship between the loading rate of inorganic mercury to aquatic ecosystems and dissolved gaseous mercury production and evasion. *Chemosphere* **65**: 2199-2207
483. Poulain, A., D. Orihel, M. Amyot, M. Paterson, G. Southworth, and H. Hintelmann. 2004. Dissolved gaseous mercury formation and evasion in boreal lake enclosures spiked with inorganic mercury. *RMZ- Materials and Geoenviron.* **51**: 1320-1323.
484. Prychitko, S.B., and R.W. Nero. 1983. Occurrence of the Acanthocephalan *Echinorhynchus leidy* (Van Cleave, 1924) in *Mysis relicta*. *Can. J. Zool.* **61**: 460-462.
485. Quay, P.D., W.S. Broecker, R.H. Hesslein, and D.W. Schindler. 1980. Vertical diffusion rates determined by tritium tracer experiments in the thermocline and hypolimnion of two lakes. *Limnol. Oceanogr.* **25**: 201-218.
486. Ramlal, P.S., J.W.M. Rudd, A. Furutani, and L. Xun. 1985. The effect of pH on methyl mercury production and decomposition in lake sediments. *Can. J. Fish. Aquat. Sci.* **42**: 685-692.
487. Ramlal, P.S., J.W.M. Rudd, and R.E. Hecky. 1986. Methods for measuring specific rates of mercury methylation and degradation and their use in determining factors controlling net rates of mercury methylation. *Appl. Environ. Microbiol.* **51**: 110-114.
488. Rasmussen, J.B., L. Godbout, and M. Schallenberg. 1989. The humic content of lake water and its relationship to watershed and lake morphometry. *Limnol. Oceanogr.* **34**: 1336-1442.
489. Reinke, D.C. and F. deNoyelles. 1985. The species-specific effects of sublethal concentrations of cadmium on freshwater phytoplankton communities in a Canadian Shield lake. *Can. J. Botany* **63**: 1997-2003.
490. Richards, S.R., C.A. Kelly, and J.W.M. Rudd. 1991. Organic volatile sulfur in lakes of the Canadian shield and its loss to the atmosphere. *Limnol. Oceanogr.* **36**: 468-482.
491. Rochefort, L., D.H. Vitt, and S.E. Bayley. 1990. Growth, production, and decomposition dynamics of *Sphagnum* under natural and experimentally acidified conditions. *Ecology* **71**: 1986-2000.

492. Rodhe, W. 1969. President's Lecture: Limnology, social welfare, and Lake Kinneret. *Int. Ver. theor. angew. Limnol. Verh.* **17**: 40-48.
493. Rolfhus, K., B. Hall, B. Monson, M.J. Paterson, and J. Jeremiason. 2011. Assessment of mercury bioaccumulation within the pelagic food web of lakes in the western Great Lakes region. *Ecotoxicology* **20**: 1520-1529.
494. Rooney, R. C., and M.J. Paterson. 2009. Ecosystem effects of rainbow smelt (*Osmerus mordax*) invasions in inland lakes: a literature review. No. 2845
- Rooney, R.C. and Podemski, C.L. 2009. Effects of an experimental rainbow trout (*Oncorhynchus mykiss*) farm on invertebrate community composition. *Can. J. Fish. Aquat. Sci.* **66**: 1949-1964.
- 495.
496. Rooney, R.C. and C.L. Podemski. 2010. Freshwater rainbow trout (*Oncorhynchus mykiss*) farming affects sediment and pore-water chemistry. *Mar. Freshwater Res.* **61**: 513-526.
497. Rooney, R.C., and C.L. Podemski. 2009. Effects of an experimental rainbow trout (*Oncorhynchus mykiss*) farm on invertebrate community composition. *Can. J. Fish. Aquat. Sci.* **66**: 1949-1964.
498. Rosenberg, D.M., F. Berkes, R.A. Bodaly, R.E. Hecky, C.A. Kelly, and J.W.M. Rudd. 1997. Large scale impacts of hydroelectric development. *Environ. Rev.* **5**: 27-54.
499. Rosenberg, D.M., R.A. Bodaly, and P.J. Usher. 1995. Environmental and social impacts of large-scale hydroelectric development: who is listening? *Global Environ. Change* **5**: 127-148.
500. Rosenberg, D.M., R.E. Hecky, and P. Campbell. 1995. Introduction to contaminants research at the Experimental Lakes Area. *Can. J. Fish. Aquat. Sci.* **52**: 2211-2212.
501. Rosenberg, D. M., M. A. Turner, W. Jansen, T. Mosindy, and D.A. Watkinson. 2010. Threats to Lake of the Woods and the Winnipeg River by the rusty crayfish (*Orconectes rusticus*), an aquatic invader. Ontario Ministry of Natural resources No. TWR-005.
502. Rosenberg, D.M., A.P. Wiens, and B. Bilyj. 1988. Chironomidae (Diptera) of peatlands in northwestern Ontario, Canada. *Holarct. Ecol.* **11**: 19-31.
503. Rosenberg, D.M., A.P. Wiens, B. Bilyj, and L. Armstrong. 1995. Experimental acidification of a poor fen in northwestern Ontario: effects on emergence of Chironomidae (Diptera). *Can. J. Fish. Aquat. Sci.* **52**: 2229-2237.
504. Rosenberg, D.M., A.P. Wiens, B. Bilyj, and L. Armstrong. 2001. Peatland Chironomidae (Diptera): effects of flooding on emergence from Lake 979, Experimental Lakes Area, Ontario. *J. N. Am. Benthol. Soc.* **20**: 448-467.
505. Rudd, J.W.M. 1995. Sources of methyl mercury to freshwater ecosystems: a review. *Water Air Soil Pollut.* **80**: 697-713.
506. Rudd, J.W.M., A. Furutani, R.J. Flett, and R.D. Hamilton. 1976. Factors controlling methane oxidation in Shield lakes: the role of nitrogen fixation and oxygen concentration. *Limnol. Oceanogr.* **21**: 357-364.
507. Rudd, J.W.M., A. Furutani, and M.A. Turner. 1980. Mercury methylation by fish intestinal contents. *Appl. Environ. Microbiol.* **40**: 777-782.

508. Rudd, J.W.M., C.C. Gilmour, and R.A. Bodaly. 1998. Introduction: Fourth International Conference, "Mercury as a Global Pollutant". [Editorial introduction to papers from Fourth International Conference, Hamberg, Germany, 4-8 August, 1996.] *Biogeochem.* **40**: 97-100.
509. Rudd, J.W.M., and R.D. Hamilton. 1973. The measurement of adenosine triphosphate (ATP) in two Precambrian Shield lakes of northwestern Ontario. *J. Fish. Res. Board Can.* **30**: 1537-1546.
510. Rudd, J.W.M., and R.D. Hamilton. 1975. Factors controlling rates of methane oxidation and the distribution of the methane oxidizers in a small stratified lake. *Arch. Hydrobiol.* **75**: 522-538.
511. Rudd, J.W.M., and R.D. Hamilton. 1975. Methane oxidation in a eutrophic Canadian Shield Lake. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 2669-2673.
512. Rudd, J.W.M., and R.D. Hamilton. 1975. Two samplers for monitoring dissolved gases on lake water and sediments. *Limnol. Oceanogr.* **20**: 902-906.
513. Rudd, J.W.M., and R.D. Hamilton. 1978. Methane cycling in a eutrophic Shield lake and its effects on whole lake metabolism. *Limnol. Oceanogr.* **23**: 337-348.
514. Rudd, J.W.M., and R.D. Hamilton. 1979. Methane cycling in Lake 227 in perspective with some components of the carbon and oxygen cycles. *Ergebn. Limnol.* **12**: 115-122.
515. Rudd, J.W.M., R.D. Hamilton, and N.E.R. Campbell. 1974. Measurement of microbial oxidation of methane in lake water. *Limnol. Oceanogr.* **19**: 519-524.
516. Rudd, J.W.M., R. Harris, C.A. Kelly, and R.E. Hecky. 1993. Are hydroelectric reservoirs significant sources of greenhouse gases? *Ambio* **22**: 246-248.
517. Rudd, J.W.M., C.A. Kelly, and A. Furutani. 1986. The role of sulfate reduction in long-term accumulation of organic and inorganic sulfur in lake sediments. *Limnol. Oceanogr.* **31**: 1281-1291.
518. Rudd, J.W.M., C.A. Kelly, and D.W. Schindler. 1988. Comment on 'Dynamic model of in-lake alkalinity generation' by L.A. Baker and P.L. Brezonik. *Wat. Resour. Res.* **24**: 1825-1827.
519. Rudd, J.W.M., C.A. Kelly, D.W. Schindler, and M.A. Turner. 1988. Disruption of the nitrogen cycle in acidified lakes. *Science* **240**: 1515-1517.
520. Rudd, J.W.M., C.A. Kelly, D.W. Schindler, and M.A. Turner. 1990. A comparison of the acidification efficiencies of nitric and sulfuric acids by two whole-lake addition experiments. *Limnol. Oceanogr.* **35**: 663-679.
521. Rudd, J.W.M., C.A. Kelly, V.H. St Louis, R.H. Hesslein, A. Furutani, and M. Holoka. 1986. Microbial consumption of nitric and sulfuric acids in acidified north temperate lakes. *Limnol. Oceanogr.* **31**: 1267-1280.
522. Rudd, J.W.M., and C.D. Taylor. 1980. Methane cycling in aquatic environments. *Advan. Aquat. Microbiol.* **2**: 77-150.
523. Rudd, J.W.M., and M.A. Turner. 1983. The English-Wabigoon River system: II. Suppression of mercury and selenium bioaccumulation by suspended and bottom sediments. *Can. J. Fish. Aquat. Sci.* **40**: 2218-2227.

524. Rudd, J.W.M., and M.A. Turner. 1983. The English-Wabigoon River system: V. Mercury and selenium bioaccumulation as a function of aquatic primary productivity. *Can. J. Fish. Aquat. Sci.* **40**: 2251-2259.
525. Rudd, J.W.M., M.A. Turner, A. Furutani, A.L. Swick, and B.E. Townsend. 1983. The English-Wabigoon River system: I. A synthesis of recent research with a view towards mercury amelioration. *Can. J. Fish. Aquat. Sci.* **40**: 2206-2217.
526. Rudd, J.W.M., M.A. Turner, B.E. Townsend, A.L. Swick, and A. Furutani. 1980. Dynamics of selenium in mercury-contaminated experimental freshwater systems. *Can. J. Fish. Aquat. Sci.* **37**: 848-857.
527. Rusak, J.A., N.D. Yan, K.M. Somers, K.L. Cottingham, F. Micheli, S.R. Carpenter, T.M. Frost, M.J. Paterson, and D.J. McQueen. 2002. Temporal, spatial, and taxonomic patterns of crustacean zooplankton variability in unmanipulated north-temperate lakes. *Limnol. Oceanogr.* **47**: 613-625.
528. Ryman, J.E., J.L.A. Van Walleghem, and P.J. Blanchfield. 2007. Methylmercury levels in a parasite (*Apophallus brevis* metacercariae) and its host, yellow perch (*Perca flavescens*). *Aquat. Ecol.* **42**: 495-501.
529. Sakamoto, M. 1971. Chemical factors involved in the control of phytoplankton production in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **38**: 203-213.
530. Salki, A., M. Turner, K. Patalas, J. Rudd, and D. Findlay. 1985. The influence of fish-zooplankton-phytoplankton interactions on the results of selenium toxicity experiments within large enclosures. *Can. J. Fish. Aquat. Sci.* **42**: 1132-1143.
531. Santschi, P.H. 1988. Factors controlling the biogeochemical cycles of trace elements in fresh and coastal marine waters as revealed by artificial radioisotopes. *Limnol. Oceanogr.* **33**: 848-866.
532. Santschi, P.H., U.P. Nyfeller, R.F. Anderson, S.L. Schiff, P. O'Hara, and R.H. Hesslein. 1986. Response of radioactive trace metals to acid-base titrations in controlled experimental ecosystems: comparison of results from enclosure and whole-lake radio-tracer additions. *Can. J. Fish. Aquat. Sci.* **43**: 60-77.
533. Sarica, J., M. Amyot, L. Hare, P.J. Blanchfield, R.A. Bodaly, H. Hintelmann, and M. Lucotte. 2005. Mercury transfer from fish carcasses to scavengers in boreal lakes: the use of stable isotopes of mercury. *Environ. Pollut.* **134**: 13-22.
534. Schiff, S.L., and R.F. Anderson. 1987. Limnocorral studies of chemical and biological acid neutralization in two freshwater lakes. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 188-193.
535. Schiff, S.L., R. Aravena, E. Mewhinney, R. Elgood, B. Warner, P. Dillon, and S. Trumbore. 1998. Precambrian Shield wetlands: hydrologic control of the sources and export of dissolved organic matter. *Clim. Change* **40**: 167-188.
536. Schindler, D.W. 1969. Two useful devices for vertical plankton and water sampling. *J. Fish. Res. Board Can.* **26**: 1948-1955.
537. Schindler, D.W. 1971. An hypothesis to explain differences and similarities among lakes in the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 295-301.
538. Schindler, D.W. 1971. Carbon, nitrogen, phosphorus and the eutrophication of freshwater lakes. *J. Phycol.* **7**: 321-329.
539. Schindler, D.W. 1971. Light, temperature and oxygen regimes of selected lakes in the Experimental Lakes Area (ELA), northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 157-169.

540. Schindler, D.W. 1973. Experimental approaches to limnology - an overview. *J. Fish. Res. Board Can.* **30**: 1409-1413.
541. Schindler, D.W. 1973. Hydrobiological studies 2 and 3 (book review). *Limnol. Oceanogr.* **18**: 819-820.
542. Schindler, D.W. 1974. Eutrophication and recovery in experimental lakes: implications for lake management. *Science* **184**: 897-899.
543. Schindler, D.W. 1975. Chemical oceanography (book review). *Limnol. Oceanogr.* **20**: 299.
544. Schindler, D.W. 1975. Factors affecting gas exchange in natural waters. *Limnol. Oceanogr.* **20**: 1053-1055.
545. Schindler, D.W. 1975. Modelling the eutrophication process (book review). *J. Fish. Res. Board Can.* **32**: 1673-1674.
546. Schindler, D.W. 1975. Whole-lake eutrophication experiments with phosphorus, nitrogen and carbon. *Int. Ver. theor. angew. Limnol. Verh.* **19**: 3221-3231.
547. Schindler, D.W. 1976. The impact statement boondoggle. *Science* **192**: 509.
548. Schindler, D.W. 1977. Evolution of phosphorus limitation in lakes: natural mechanisms compensate for deficiencies of nitrogen and carbon in eutrophied lakes. *Science* **195**: 260-262.
549. Schindler, D.W. 1978. Factors regulating phytoplankton production and standing crop in the world's freshwaters. *Limnol. Oceanogr.* **23**: 478-486.
550. Schindler, D.W. 1978. Predictive eutrophication models. *Limnol. Oceanogr.* **23**: 1080-1081.
551. Schindler, D.W. 1980. Evolution of the Experimental Lakes project. *Can. J. Fish. Aquat. Sci.* **37**: 313-319.
552. Schindler, D.W. 1980. The effect of fertilization with phosphorus and nitrogen versus phosphorus alone on eutrophication of experimental lakes. *Limnol. Oceanogr.* **25**: 1149-1152.
553. Schindler, D.W. 1981. Ecology of freshwaters (book review). *Can. J. Fish. Aquat. Sci.* **38**: 1015.
554. Schindler, D.W. 1981. Sulfur dioxide emissions. *Science* **214**: 1074.
555. Schindler, D.W. 1986. The significance of in-lake production of alkalinity. *Water Air Soil Pollut.* **30**: 931-944.
556. Schindler, D.W. 1987. Detecting ecosystem responses to anthropogenic stress. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 6-25.
557. Schindler, D.W. 1988. Confusion over the origin of alkalinity in lakes. *Limnol. Oceanogr.* **33**: 1637-1640.
558. Schindler, D.W. 1988. Effects of acid rain on freshwater ecosystems. *Science* **239**: 149-157.
559. Schindler, D.W. 1988. Experimental studies of chemical stressors on whole lake ecosystems. Edgardo Baldi memorial lecture. *Int. Ver. theor. angew. Limnol. Verh.* **23**: 11-41.
560. Schindler, D.W. 1989. Letter to the editor. *Sci. Am.* **26**: 7.

561. Schindler, D.W. 1990. Experimental perturbation of whole lakes and tests of hypotheses concerning ecosystem structure and function. *Oikos* **57**: 25-41.
562. Schindler, D.W. 1992. A view of NAPAP from north of the border. *Ecol. Applic.* **2**: 124-130.
563. Schindler, D.W. 1997. Liming to restore acidified lakes and streams: A typical approach to restoring damaged ecosystems? *Restoration Ecology* **1**: 1-6.
564. Schindler, D.W. 1997. Widespread effects of climatic warming on freshwater ecosystems in North America. *Hydrol. Process.* **11**: 1043-1067.
565. Schindler, D.W. 1998. A dim future for Boreal forest waters and landscape: Cumulative effects of climate warming, stratospheric ozone depletion, acid precipitation and other human activities. *Bioscience* **48**: 157-164.
566. Schindler, D.W. 1998. Replication versus realism: The need for ecosystem-scale experiments. *Ecosystems* **1**: 323-334.
567. Schindler, D.W. 1998. Sustaining aquatic ecosystems in boreal regions. *Conserv. Ecol.* **2**: 18. Available from the Internet. URL: <http://www.consecol.org/vol2/iss2/art18>
568. Schindler, D.W. 1999. From acid rain to toxic snow (Volvo Environmental Prize Lecture). *Ambio* **28**: 350-355.
569. Schindler, D.W. 2001. The cumulative effects of climate warming and other human stresses on Canadian freshwaters in the new millennium. *Can. J. Fish. Aquat. Sci.* **58**: 18-29.
570. Schindler, D.W. 2006. Recent advances in the understanding and management of eutrophication. *Limnol. Oceanogr.* **51(1, part 2)**: 356-363.
571. Schindler, D.W. 2009. A personal history of the Experimental Lakes Project. *Can. J. Fish. Aquat. Sci.* **66**: 1837-1847.
572. Schindler, D.W., F.A.J. Armstrong, S.K. Holmgren, and G.J. Brunskill. 1971. Eutrophication of Lake 227, Experimental Lakes Area, northwestern Ontario, by addition of phosphate and nitrate. *J. Fish. Res. Board Can.* **28**: 1763-1782.
573. Schindler, D.W., S.E. Bayley, P.J. Curtis, B.R. Parker, M.P. Stainton, and C.A. Kelly. 1992. Natural and man-caused factors affecting the abundance and cycling of dissolved organic substances in Precambrian Shield lakes. *Hydrobiologia* **229**: 1-21.
574. Schindler, D.W., S.E. Bayley, B.R. Parker, K.G. Beaty, D.R. Cruikshank, E.J. Fee, E.U. Schindler, and M.P. Stainton. 1996. The effects of climate warming on the properties of boreal lakes and streams at the Experimental Lakes Area, northwestern Ontario. *Limnol. Oceanogr.* **41**: 1004-1017.
575. Schindler, D.W., K. Beaty, E.J. Fee, D. Cruikshank, E. de Bruyn, D. Findlay, G. Linsey, J.A. Shearer, M. Stainton, and M.A. Turner. 1990. Effects of climatic warming on lakes of the western Boreal forest. *Science* **250**: 967-970.
576. Schindler, D.W., G.J. Brunskill, S. Emerson, W.S. Broecker, and T.-H. Peng. 1972. Atmospheric carbon dioxide: its role in maintaining phytoplankton standing crops. *Science* **177**: 1192-1194.

577. Schindler, D.W., and S.R. Carpenter. 1998. Editorial: Workshop on ecosystem manipulation. [Editorial introduction to selection of papers from the Fourth International Workshop on Ecosystem Manipulation, Jasper, Alberta, 14-17 October 1997]. *Ecosystems* **1**: 321-322.
578. Schindler, D.W., A.S. Clark, and J.R. Gray. 1971. Seasonal calorific values of freshwater zooplankton, as determined with a Phillipson bomb calorimeter modified for small samples. *J. Fish. Res. Board Can.* **28**: 559-564.
579. Schindler, D.W., and G.W. Comita. 1972. The dependence of primary production upon physical and chemical factors in a small senescing lake, including the effects of complete winter oxygen depletion. *Arch. Hydrobiol.* **69**: 413-451.
580. Schindler, D.W., and P.J. Curtis. 1997. The role of DOC in protecting freshwaters subjected to climatic warming and acidification from UV exposure. *Biogeochem.* **36**: 1-8.
581. Schindler, D.W., P.J. Curtis, S.E. Bayley, B.R. Parker, K.G. Beaty, and M.P. Stainton. 1997. Climate-induced changes in the dissolved organic carbon budgets of boreal lakes. *Biogeochem.* **36**: 9-28.
582. Schindler, D.W., P.J. Curtis, B.R. Parker, and M.P. Stainton. 1996. Consequences of climatic warming and lake acidification for UV-B penetration in North American boreal lakes. *Nature* **379**: 705-708
583. Schindler, D.W., P.J. Dillon, and H. Schreier. 2006. A review of anthropogenic sources of nitrogen and their effects on Canadian aquatic ecosystems. *Biogeochem.* **79**: 25-44.
584. Schindler, D.W., and E.J. Fee. 1973. Diurnal variation of dissolved inorganic carbon and its use in estimating primary production and CO₂ invasion in Lake 227. *J. Fish. Res. Board Can.* **30**: 1501-1510.
585. Schindler, D.W., and E.J. Fee. 1974. The Experimental Lakes Area: whole-lake experiments in eutrophication. *J. Fish. Res. Board Can.* **31**: 937-953.
586. Schindler, D.W., E.J. Fee, and T. Ruzsyczynski. 1978. Phosphorus input and its consequences for phytoplankton standing crop and production in the Experimental Lakes Area and in similar lakes. *J. Fish. Res. Board Can.* **35**: 190-196.
587. Schindler, D.W., T.M. Frost, K.H. Mills, P.S.S. Chang, I.J. Davies, D.L. Findlay, D.F. Malley, J.A. Shearer, M.A. Turner, P.J. Garrison, C.J. Watras, K. Webster, J.M. Gunn, P.L. Brezonik, and W.A. Swenson. 1991. Comparisons between experimentally- and atmospherically-acidified lakes during stress and recovery. *Proc. Royal Soc. Edinbur* **97B**: 193-226.
588. Schindler, D.W., V.E. Frost, and R.V. Schmidt. 1973. Production of epilithiphyton in two lakes of the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **30**: 1511-1524.
589. Schindler, D.W. and Hecky, R.E. 2009. Eutrophication: More Nitrogen Data Needed. *Science* **324**: 721-72b.
590. Schindler, D.W., R.E. Heckey, D.L. Findlay, M.P. Stainton, B.R. Parker, M.J. Paterson, K.G. Beaty, M. Lyng, and S.E.M. Kasian. 2008. Eutrophication of lakes cannot be controlled by reducing nitrogen input: Results of a 37-year whole-ecosystem experiment. *Proc. Nat. Acad. Sci. USA* **105**: 11254-11258.
591. Schindler, D.W., R.H. Hesslein, and M.A. Turner. 1987. Exchange of nutrients between sediments and water after 15 years of experimental eutrophication. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 26-33.
592. Schindler, D.W., R.H. Hesslein, R. Wagemann, and W.S. Broecker. 1980. Effects of acidification on mobilization of heavy metals and radionuclides from the sediments of a freshwater lake. *Can. J. Fish. Aquat.*

- Sci.* 37: 373-377.
593. Schindler, D.W., and S.K. Holmgren. 1971. Primary production and phytoplankton in the Experimental Lakes Area, northwestern Ontario, and other low-carbonate waters, and a liquid scintillation method for determining ^{14}C activity in photosynthesis. *J. Fish. Res. Board Can.* **28**: 189-201.
594. Schindler, D.W., J. Kalff, H.E. Welch, G.J. Brunskill, H. Kling, and N. Kritsch. 1974. Eutrophication in the high Arctic - Meretta Lake, Cornwallis Island (75° N lat.). *J. Fish. Res. Board Can.* **31**: 647-662.
595. Schindler, D.W., S.E.M. Kasian, and R.H. Hesslein. 1989. Biological impoverishment in lakes of the midwestern and northeastern United States from acid rain. *Environ. Sci. Technol.* **23**: 573-580.
596. Schindler, D.W., S.E.M. Kasian, and R.H. Hesslein. 1989. Losses of biota from American aquatic communities due to acid rain. *Environ. Monit. Assess.* **12**: 269-285.
597. Schindler, D.W., H. Kling, R.V. Schmidt, J. Prokopowich, V.E. Frost, R.A. Reid, and M. Capel. 1973. Eutrophication of Lake 227 by addition of phosphate and nitrate. Part 2. The second, third and fourth years of enrichment, 1970, 1971, 1972. *J. Fish. Res. Board Can.* **30**: 1415-1440.
598. Schindler, D.W., and D.R.S. Lean. 1974. Biological and chemical mechanisms in eutrophication of freshwater lakes. *Ann. N.Y. Acad. Sci.* **250**: 129-135.
599. Schindler, D.W., K.H. Mills, D.F. Malley, D.L. Findlay, J.A. Shearer, I.J. Davies, M.A. Turner, G.A. Linsey, and D.R. Cruikshank. 1985. Long-term ecosystem stress: the effects of years of acidification on a small lake. *Science* **228**: 1395-1401.
600. Schindler, D.W., R.W. Newbury, K.G. Beaty, and P. Campbell. 1976. Natural water and chemical budgets for a small Precambrian lake basin in central Canada. *J. Fish. Res. Board Can.* **33**: 2526-2543.
601. Schindler, D.W., R.W. Newbury, K.G. Beaty, J. Prokopowich, T. Rusczyński, and J.A. Dalton. 1980. Effects of a windstorm and forest fire on chemical losses from forested watersheds and on the quality of receiving streams. *Can. J. Fish. Aquat. Sci.* **37**: 328-334.
602. Schindler, D.W., and J.E. Nighswander. 1970. Nutrient supply and primary production in Clear Lake, eastern Ontario. *J. Fish. Res. Board Can.* **27**: 2009-2036.
603. Schindler, D.W., and B. Noven. 1971. Vertical distribution and seasonal abundance of zooplankton in two shallow lakes of the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 245-256.
604. Schindler, D.W., T. Rusczyński, and E.J. Fee. 1980. Hypolimnion injection of nutrient effluents as a method for reducing eutrophication. *Can. J. Fish. Aquat. Sci.* **37**: 320-327.
605. Schindler, D.W., R.V. Schmidt, and R.A. Reid. 1972. Acidification and bubbling as an alternative to filtration in determining phytoplankton production by the ^{14}C method. *J. Fish. Res. Board Can.* **29**: 1627-1631.
606. Schindler, D.W., and M.A. Turner. 1982. Biological, chemical and physical responses of lakes to experimental acidification. *Water Air Soil Pollut.* **18**: 259-271.
607. Schindler, D.W., M.A. Turner, and R.H. Hesslein. 1985. Acidification and alkalization of lakes by experimental addition of nitrogen compounds. *Biogeochem.* **1**: 117-133.
608. Schindler, D.W., M.A. Turner, M.P. Stainton, and G.A. Linsey. 1986. Natural sources of acid neutralizing

- capacity in low alkalinity lakes of the Precambrian Shield. *Science* **232**: 844-847.
609. Schindler, D.W., R. Wagemann, R.B. Cook, T. Rusczyński, and J. Prokopowich. 1980. Experimental acidification of Lake 223, Experimental Lakes Area: background data and the first three years of acidification. *Can. J. Fish. Aquat. Sci.* **37**: 342-354.
610. Schindler, D.W., H.E. Welch, J. Kalff, G.J. Brunskill, and N. Kritch. 1974. Physical and chemical limnology of Char Lake, Cornwallis Island (75° N lat.). *J. Fish. Res. Board Can.* **31**: 585-607.
611. Schindler, E.U., E.R. DeBruyn, E.J. Fee., and J.A. Shearer. 1994. Sensitivity of estimates of seasonal phytoplankton photosynthesis to sampling frequency. *Can. J. Fish. Aquat. Sci.* **51**: 2734-2738.
612. Scott, K.J., C.A. Kelly, and J.W.M. Rudd. 1999. The importance of floating peat to methane fluxes from flooded peatlands. *Biogeochem.* **47**: 187-202.
613. Scott, J.T. and M.J. McCarthy. 2010. Nitrogen fixation may not balance the nitrogen pool in lakes over timescales relevant to eutrophication management. *Limnology and Oceanography* **55**: 1265-1270.
614. Scott, J.T. and M.J. McCarthy. 2011. Response to Comment: Nitrogen fixation has not offset declines in the Lake 227 nitrogen pool and shows that nitrogen control deserves consideration in aquatic ecosystems. *Limnology and Oceanography* **56**: 1548-1550.
615. Segstro, M.D., D.C.G. Muir, M.R. Servos, and G.R.B. Webster. 1995. Long-term fate and bioavailability of sediment-associated polychlorinated dibenzo-*p*-dioxins in aquatic mesocosms. *Environ. Toxicol. Chem.* **14**: 1799-1807.
616. Sellers, P., R.H. Hesslein, and C.A. Kelly. 1995. Continuous measurement of CO₂ for estimation of air-water fluxes in lakes: An *in situ* technique. *Limnol. Oceanogr.* **40**: 575-581.
617. Sellers, P., C.A. Kelly, and J.W.M. Rudd. 2001. Fluxes of methylmercury to the water column of a drainage lake: The relative importance of internal and external sources. *Limnol. Oceanogr.* **46**: 623-631.
618. Sellers, P., C.A. Kelly, J.W.M. Rudd, and A.R. MacHutchon. 1996. Photodegradation of methylmercury in lakes. *Nature* **380**:694-697.
619. Sellers, T.J., B. R. Parker, D.W. Schindler, and W.M. Tonn. 1998. Pelagic distribution of lake trout (*Salvelinus namaycush*) in small Canadian Shield lakes with respect to temperature, dissolved oxygen, and light. *Can. J. Fish. Aquat. Sci.* **55**: 170-179.
620. Servos, M.R., D.F. Malley, G.L. Mackie, and B.D. LaZerte. 1987. Lack of bioaccumulation of metals by *Elliptio complanata* (Bivalvia) during acidic snowmelt in three south-central Ontario streams. *Bull. Environ. Contam. Toxicol.* **38**: 762-768.
621. Servos, M.R., and D.C.G. Muir. 1989. The effect of dissolved organic matter from Canadian Shield lakes on the bioavailability of 1,3,6,8-tetrachlorodibenzo-*p*-dioxin to the amphipod *Crangonix laurentianus*. *Environ. Toxicol. Chem.* **8**: 141-150.
622. Servos, M.R., and D.C.G. Muir. 1989. Effect of suspended sediment concentration on the sediment to water partition coefficient for 1,3,6,8-tetrachlorodibenzo-*p*-dioxin. *Environ. Sci. Technol.* **23**: 1302-1306.
623. Servos, M.R., D.C.G. Muir, and G.R.B. Webster. 1989. The effect of dissolved organic matter on the bioavailability of polychlorinated dibenzo-*p*-dioxins. *Aquat. Toxicol.* **14**: 169-184.

624. Servos, M.R., D.C.G. Muir, and G.R.B. Webster. 1992. Environmental fate of polychlorinated dibenzo-*p*-dioxins in lake enclosures. *Can. J. Fish. Aquat. Sci.* **49**: 722-734.
625. Servos, M.R., D.C.G. Muir, D.M. Whittle, D.B. Sergeant, and G.R.B. Webster. 1989. Bioavailability of octachlorodibenzo-*p*-dioxin in aquatic ecosystems. *Chemosphere* **19**: 969-972.
626. Servos, M.R., D.C.G. Muir, and G.R.B. Webster. 1992. Bioavailability of polychlorinated dibenzo-*p*-dioxins in lake enclosures. *Can. J. Fish. Aquat. Sci.* **49**: 735-742.
627. Shaffer, P.W., R.P. Hooper, K.N. Eshleman, and M.R. Church. 1988. Watershed and in-lake alkalinity generation: a comparison of rates using input-output studies. *Water Air Soil Pollut.* **39**: 263-273.
628. Shearer, J.A., and E.R. DeBruyn. 1986. Phytoplankton productivity responses to direct addition of sulfuric and nitric acids to the waters of a double-basin lake. *Water Air Soil Pollut.* **30**: 695-702.
629. Shearer, J.A., E.J. Fee, E.R. DeBruyn, and D.R. DeClercq. 1987. Phytoplankton primary production and light attenuation response to the experimental acidification of a small Canadian Shield lake. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 83-90.
630. Shearer, J.A., E.J. Fee, E.R. DeBruyn, and D.R. DeClercq. 1987. Phytoplankton productivity changes in a small, double-basin lake in response to termination of experimental fertilization. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 47-54.
631. Shurin, J., S.E. Arnott, H. Hillebrand, A. Longmuir, B. Pinel-Alloul, M. Winder, and N.D. Yan. 2007. Diversity-stability relationship varies with latitude in zooplankton. *Ecol. Lett.* **10**: 127-134.
632. Shurin, J.B., M. Winder, R. Adrian, W. Keller, B. Matthews, M. A. Paterson, M.J. Paterson, B. Pinel-Alloul, J.A. Rusak, and N.D. Yan. 2010. Environmental stability and lake zooplankton diversity – contrasting effects of chemical and thermal variability. *Ecology Letters* **13**: 453-463
633. Shuter, B.J., M.L. Jones, R.M. Korver, and N.P. Lester. 1998. A general, life history based model for regional management of fish stocks: the inland lake trout (*Salvelinus namaycush*) fisheries of Ontario. *Can. J. Fish. Aquat. Sci.* **55**: 2161-2177.
634. Siwik, E.I.H., L.M. Campbell, and G. Mierle. 2009. Fine-scale mercury trends in temperate deciduous tree leaves from Ontario, Canada. *Science of the Total Environment* **407**: 6275-6279.
635. Southworth, G., S. Lindberg, M. Bogle, M. Amyot, A. Poulain, H. Hintelmann, M. Olson, and K. Sandilands. 2004. Isotopic tracer studies of volatilization of mercury from a north temperate lake. *RMZ-Materials and Geoenviron.* **51**: 1765-1768.
636. Southworth, G., S. Lindberg, H. Hintelmann, M. Amyot, A. Poulain, M. Bogle, M. Paterson, J. Rudd, R. Harris, K. Sandilands, D. Krabbenhoft, and M. Olsen. 2007. Evasion of isotopic mercury from a northern temperate lake. *Environ. Toxicol. Chem.* **26**: 53-60.
637. Sprules, W.G. 1977. Crustacean zooplankton communities as indicators of limnological conditions: and approach using principal component analysis. *J. Fish. Res. Board Can.* **34**: 962-975.
638. St. George, S., D.M. Meko, and M.N. Evans. 2008. Regional tree growth and inferred summer climate in the Winnipeg River basin, Canada since AD 1783. *Quat. Res.* **ASAP**.
639. St. Louis, V.L. 1993. Element concentrations in chironomids and their abundance in the littoral zone of

- acidified lakes in northwestern Ontario. *Can. J. Fish. Aquat. Sci.* **50**: 953-963.
640. St. Louis, V.L., and J.C. Barlow. 1993. The reproductive success of tree swallows nesting near experimentally acidified lakes in northwestern Ontario. *Can. J. Zool.* **71**: 1090-1097.
641. St. Louis, V.L., J.C. Barlow, and J.F. Klaverkamp. 1993. Metal accumulation and metallothionein concentrations in tree swallow nestlings near acidified lakes. *Environ. Toxicol. Chem.* **12**: 1203-1207.
642. St. Louis, V.L., J.C. Barlow, and J.P. Sweerts. 1989. Toenail-clipping: A simple technique for marking individual nidicolous chicks. *J. Field Ornithol.* **60**: 211-215.
643. St. Louis, V.L., and L. Breebaart. 1991. Calcium supplements in the diet of nestling tree swallows near acid sensitive lakes. *The Condor* **93**: 286-294.
644. St. Louis, V.L., L. Breebaart, and J.C. Barlow. 1990. Foraging behaviour of tree swallows over acidified and non-acidic lakes. *Can. J. Zool.* **68**: 2385-2392.
645. St. Louis, V.L., L. Breebaart, J.C. Barlow, and J.F. Klaverkamp. 1993. Metal accumulation and metallothionein concentrations in tree swallows nestlings near acidified lakes. *Environ. Toxicol. Chem.* **12**: 1203-1207.
646. St. Louis, V.L., C.A. Kelly, E. Duchemin, J.W.M. Rudd, and D.M. Rosenberg. 2000. Reservoir surfaces as sources of greenhouse gases to the atmosphere: a global estimate. *BioScience* **50**: 766-775.
647. St. Louis, V.L., A.D. Partridge, C.A. Kelly, and J.W.M. Rudd. 2003. Mineralization rates of peat from eroding peatlands in reservoirs. *Biogeochem.* **64**: 97-100.
648. St. Louis, V.L., J.W.M. Rudd, C.A. Kelly, and L.A. Barrie. 1995. Wet deposition of methyl mercury in northwestern Ontario compared to other geographic locations. *Water Air Soil Pollut.* **80**: 405-414.
649. St. Louis, V.L., J.W.M. Rudd, C.A. Kelly, K.G. Beaty, N.S. Bloom, and R.J. Flett. 1994. Importance of wetlands as sources of methyl mercury to boreal forest ecosystems. *Can. J. Fish. Aquat. Sci.* **51**: 1065-1076.
650. St. Louis, V.L., J.W.M. Rudd, C.A. Kelly, K.G. Beaty, R.J. Flett, and N.T. Roulet. 1996. Production and loss of methylmercury and loss of total mercury from boreal forest catchments containing different types of wetlands. *Environ. Sci. Technol.* **30**: 2719-2729.
651. St. Louis, V.L., J.W.M. Rudd, C.A. Kelly, R.A. Bodaly, M.J. Paterson, K.G. Beaty, R.H. Hesslein, A. Heyes, and A.R. Majewski. 2004. The rise and fall of mercury methylation in an experimental reservoir. *Environ. Sci. Technol.* **38**: 1348-1358.
652. St. Louis, V.L., J.W.M. Rudd and C.A. Kelly, B.D. Hall, K.R. Rolfhus, K.J. Scott, S.E. Lindberg and W. Dong. 2001. Importance of the forest canopy to fluxes of methyl mercury and total mercury to boreal ecosystems. *Environ. Sci. Technol.* **35**: 3089-3098. [METAALICUS contribution #1]
653. Stainton, M.P. 1973. A syringe gas-stripping procedure for gas-chromatographic determination of dissolved inorganic and organic carbon in freshwater and carbonates in sediments. *J. Fish. Res. Board Can.* **30**: 1441-1445.
654. Stainton, M.P. 1974. An automated method for determination of chloride and sulfate in freshwater using cation exchange and measurement of electrical conductance. *Limnol. Oceanogr.* **19**: 707-711.
655. Stainton, M.P. 1980. Errors in molybdenum blue methods for determining orthophosphate in fresh water.

- Can. J. Fish. Aquat. Sci.* **37**: 471-478.
656. Stephenson, M., L. Bendell-Young, G.A. Bird, G.J. Brunskill, P.J. Curtis, W.L. Fairchild, M.H. Holoka, R.V. Hunt, S.G. Lawrence, M.F. Motycka, W.J. Schwartz, M.A. Turner, and P. Wilkinson. 1996. Sedimentation of experimentally-added cadmium and ¹⁰⁹Cd in Lake 302, Experimental Lakes Area, Canada. *Can. J. Fish. Aquat. Sci.* **53**: 1888-1902.
657. Stephenson, M., J. Klaverkamp, M. Motycka, C. Baron, and W. Schwartz. 1996. Coring artifacts and contaminant inventories in lake sediment. *J. Paleolimnol.* **15**: 99-106.
658. Stephenson, M., G. Mierle, R.A. Reid, and G.L. Mackie. 1994. Effects of experimental and cultural lake acidification on littoral benthic macroinvertebrate assemblages. *Can. J. Fish. Aquat. Sci.* **51**: 1147-1161.
659. Stephenson, M., W.J. Schwartz, T.W. Melnyk, and M.F. Motycka. 1994. Measurement of advective water velocity in lake sediment using natural helium gradients. *J. Hydrology* **154**: 63-84.
660. Stephenson, M., W.J. Schwartz, and M. Motycka. 1993. Regional survey for He anomalies in Canadian Shield lakes: sources of variation and implications for nuclear fuel waste management. *Appl. Geochem.* **8**: 373-382.
661. Stephenson, M., W.J. Schwartz, M.F. Motycka, D.J. Rowan, C. Kelly, and R.D. Roshon. 1995. Fate and distribution in sediments of carbon-14 added to Canadian Shield lakes of differing trophic state. *Limnol. Oceanogr.* **40**: 779-790.
662. Stephenson, M., and M.A. Turner. 1993. A field study of cadmium dynamics in periphyton and in *Hyaella azteca* (Crustacea: Amphipoda). *Water Air Soil Pollut.* **68**: 341-361.
663. Sterner, R.W. 1997. Modelling interactions of food quality and quantity in homeostatic consumers. *Freshw. Biol.* **38**: 473-481.
664. Sterner, R.W. 1998. Demography of a natural population of *Daphnia* in a lake with low food quality. *J. Plankton Res.* **20**: 471-489.
665. Sterner, R.W., T.H. Chrzanowski, J.J. Elser, and N.B. George. 1995. Sources of nitrogen and phosphorus supporting the growth of bacterio- and phytoplankton in an oligotrophic Canadian Shield lake. *Limnol. Oceanogr.* **40**: 242-249.
666. Sterner, R.W., J.J. Elser, E.J. Fee, S.J. Guildford, and T.H. Chryzanowski. 1997. The light:nutrient ratio in lakes: the balance of energy and materials affects ecosystem structure and process. *Am. Nat.* **150**: 663-684.
667. Sterner, R.W., and N.B. George. 2000. Carbon, nitrogen, and phosphorus stoichiometry of Cyprinid fishes. *Ecology* **81**: 127-140.
668. Sterner, R.W., J.H. Schampel, K.L. Schulz, A.E. Galford, and J.J. Elser. 2000. Joint variation of zooplankton and seston stoichiometry in lakes and reservoirs. *Int. Ver. theor. angew. Limnol. Verh.* **27**: 3009-3014.
669. Stewart, A.R. 1999. Accumulation of Cd by a freshwater mussel (*Pyganodon grandis*) is reduced in the presence of Cu, Zn, Pb, and Ni. *Can. J. Fish. Aquat. Sci.* **56**: 467-478.
670. Stewart, A.R., and D.F. Malley. 1999. Effect of metal mixture (Cu, Zn, Pb, and Ni) on cadmium partitioning in littoral sediments and its accumulation by the freshwater macrophyte *Eriocaulon septangulare*. *Environ. Toxicol. Chem.* **18**: 436-447.

671. Stockner, J.G. 1971. Preliminary characterization of lakes in the Experimental Lakes Area, northwestern Ontario, using diatom occurrences in sediments. *J. Fish. Res. Board Can.* **28**: 265-275.
672. Stockner, J.G., and F.A.J. Armstrong. 1971. Periphyton of the Experimental Lakes Area, northwestern Ontario. *J. Fish. Res. Board Can.* **28**: 215-229.
673. Stoddard, J.L., D.S. Jeffries, A. Lükewille, T.A. Clair, P.J. Dillon, C.T. Driscoll, M. Forsius, M. Johannessen, J.S. Kahl, J.H. Kellogg, A. Kemp, J. Mannio, D. Monteith, P.S.P.S. Murdoch, A. Rebsdorf, B.L. Skjelkvåle, M.P. Stainton, T. Traaen, H. van Dam, K.E. Webster, J. Wieting, and A. Wilander. 1999. Regional trends in aquatic recovery from acidification in North America and Europe. *Nature* **401**: 575-578.
674. Stokstad, E. 2008. Canada's Experimental Lakes. *Science* **322**: 1316-1319.
675. Stordal, M.C., and G.A. Gill. 1995. Determination of mercury methylation rates using a ²⁰³Hg radiotracer technique. *Water Air Soil Pollut.* **80**: 725-734.
676. Suchy, K.D., and B.J. Hann. 2007. Using microfossil remains in lake sediments to examine the invasion of *Eubosmina coregoni* (Cladocera, Bosminidae) in Lake of the Woods, Ontario, Canada. *J. Great Lakes Res.* **33**: 867-874.
677. Sweerts, J-P.R.A., C.A. Kelly, J.W.M. Rudd, R. Hesslein, and T.E. Cappenberg. 1991. Similarity of whole-sediment molecular diffusion coefficients in freshwater sediments of low and high porosity. *Limnol. Oceanogr.* **36**: 335-342.
678. Sweerts, J-P.R.A., J.W.M. Rudd, and C.A. Kelly. 1986. Metabolic activities in flocculent surface sediments and underlying sandy littoral sediments. *Limnol. Oceanogr.* **31**: 330-338.
679. Sweerts, J-P.R.A., V. St. Louis, and T.E. Cappenberg. 1989. Oxygen concentration profiles and exchange in sediment cores with circulated overlying water. *Freshw. Biol.* **21**: 401-409.
680. Tank, S.E., M.A. Xenopoulos, and L.L. Hendzel. 2005. Effect of ultraviolet radiation on alkaline phosphatase activity and planktonic phosphorus acquisition in Canadian boreal shield lakes. *Limnol. Oceanogr.* **50**: 1345-1351.
681. Thompson, B.M., and R.D. Hamilton. 1973. Heterotrophic utilization of sucrose in an artificially enriched lake. *J. Fish. Res. Board Can.* **30**: 1547-1552.
682. Thum, R.A., and A.M. Derry. 2008. Taxonomic implications for diaptomid copepods based on contrasting patterns of mitochondrial DNA sequence divergences in four morphospecies. *Hydrobiologia* **614**: 197-207.
683. Torgersen, T., and W.B. Clarke. 1978. Excess helium-4 in Teggau Lake. Possibilities for a uranium ore body. *Science* **199**: 769-771.
684. Torgersen, T., G. Mathieu, R.H. Hesslein, and W.S. Broecker. 1982. Gas exchange dependency on diffusion coefficient: direct ²²²Rn and ³He comparisons in a small lake. *J. Geophys. Res.* **87**: 546-556.
685. Turner, M.A., D.L. Findlay, H.M. Baulch, L.M. Armstrong, S.E.M. Kasian, D. McNicol, and R D. Vinebrooke. 2009. Benthic algal communities: recovery from experimental acidification. *Can. J. Fish. Aquat. Sci.* **66**: 1875-1891.
686. Turner, M.A., E.T. Howell, G.G.C. Robinson, J.F. Brewster, L.J. Sigurdson, and D.L. Findlay. 1995. Growth characteristics of bloom-forming filamentous green algae in the littoral zone of an experimentally

- acidified lake. *Can. J. Fish. Aquat. Sci.* **52**: 2251-2263.
687. Turner, M.A., E.T. Howell, G.G.C. Robinson, P. Campbell, R.E. Hecky, and E.U. Schindler. 1994. Roles of nutrients in controlling growth of epilithon in oligotrophic lakes of low alkalinity. *Can. J. Fish. Aquat. Sci.* **51**: 2784-2793.
688. Turner, M.A., E.T. Howell, M. Summerby, R.H. Hesslein, D.L. Findlay, and M.B. Jackson. 1991. Changes in epilithon and epiphyton associated with experimental acidification of a lake to pH 5. *Limnol. Oceanogr.* **36**: 1390-1405.
689. Turner, M.A., D.B. Huebert, D.L. Findlay, L.L. Hendzel, W.A. Jansen, R.A. Bodaly, L.M. Armstrong, and S.E.M. Kasian. 2005. Divergent impacts of experimental lake-level drawdown on planktonic and benthic plant communities in a boreal forest lake. *Can. J. Fish. Aquat. Sci.* **62**: 991-1003.
690. Turner, M.A., M.B. Jackson, D.L. Findlay, R.W. Graham, E.R. DeBruyn, and E.M. Vandermeer. 1987. Early responses of periphyton to experimental lake acidification. *Can. J. Fish. Aquat. Sci.* **44**(Suppl. 1): 135-149.
691. Turner, M.A., G.G.C. Robinson, B.E. Townsend, B.J. Hann, and J.A. Amaral. 1995. Ecological effects of blooms of filamentous green algae in the littoral zone of an acid lake. *Can. J. Fish. Aquat. Sci.* **52**: 2264-2275.
692. Turner, M.A., and J.W.M. Rudd. 1983. The English-Wabigoon River system. III. Selenium in lake enclosures: its geochemistry, bioaccumulation and ability to reduce mercury bioaccumulation. *Can. J. Fish. Aquat. Sci.* **40**: 2228-2240.
693. Turner, M.A., D.W. Schindler, D.L. Findlay, M.B. Jackson, and G.G.C. Robinson. 1995. Disruption of littoral algal associations by experimental lake acidification. *Can. J. Fish. Aquat. Sci.* **52**: 2238-2250.
694. Turner, M.A., and A.L. Swick. 1983. The English-Wabigoon River system. IV. Interaction between mercury and selenium accumulated from waterborne and dietary sources by northern pike (*Esox lucius*). *Can. J. Fish. Aquat. Sci.* **40**: 2241-2250.
695. Urabe, J., M. Kyle, W. Makino, T. Yoshida, T. Anderson, and J.J. Elser. 2002. Reduced Light increases herbivore production due to stoichiometric effects of light/nutrient balance. *Ecology* **83**: 619-627.
696. Urabe, J., W. Makino, K. Hayakawa, and J.J. Elser. 2002. Food quality determinants for *Daphnia* growth in P-limited lakes. *Int. Ver. theor. angew. Limnol. Verh.* **28**: 1089-1094.
697. Urban, N.R., and S.E. Bayley. 1986. The acid-base balance of peatlands: A short-term perspective. *Water, Air, and Soil Pollut.* **30**: 791-800.
698. Urban, N.R., S.E. Bayley, and S.J. Eisenreich. 1989. Export of dissolved organic carbon and acidity from peatlands. *Water Resour. Res.* **25**: 1619-1628.
699. Urban, N.R., S.J. Eisenreich, and S.E. Bayley. 1988. The relative importance of denitrification and nitrate assimilation in mid-continental bogs. *Limnol. Oceanogr.* **33**: 1611-1617.
700. Valeo, C., K. Beaty, and R. Hesslein. 2003. Influence of forest fires on climate change studies in the central boreal forest of Canada. *J. Hydrol.* **280**: 91-104.
701. Vanni, M.J. 1988. Freshwater zooplankton community structure: introduction of large invertebrate predators and large herbivores to a small-species community. *Can. J. Fish. Aquat. Sci.* **45**: 1758-1770.

702. Vanni, M.J., and D.L. Findlay. 1990. Trophic cascades and phytoplankton community structure. *Ecology* **71**: 921-937.
703. Van Walleggem, J.L.A., P.J. Blanchfield, and H. Hintelmann. 2007. Elimination of mercury by yellow perch in the wild. *Environ. Sci. Technol.* **41**: 5895-5901.
704. Venkiteswaran, J.J., and S.L. Schiff. 2005. Methane oxidation: isotopic enrichment factors in freshwater boreal reservoirs. *Appl. Geochem.* **20**: 683-690.
705. Venkiteswaran, J.J., L.I. Wassenaar, and S.L. Schiff. 2007. Dynamics of dissolved oxygen isotopic ratios: a transient model to quantify primary production, community respiration, and air-water exchange in aquatic ecosystems. *Oecologia* **153**: 385-398.
706. Vinebrooke, R.D., M.A. Turner, D.L. Findlay, and M.J. Paterson. 2009. A stressor-independent test for biodiversity – ecosystem function relationships during a 23-year whole-lake experiment. *Can. J. Fish. Aquat. Sci.* **66**: 1903-1909.
707. Vinebrooke, R.D., M. Graham, D.L. Findlay, M.A. Turner, M. Paterson, and K.H. Mills. 2003. Resilience of epilithic algal assemblages in atmospherically and experimentally acidified boreal lakes. *Ambio* **32**: 196-202.
708. Vinebrooke, R.D., D.W. Schindler, D.L. Findlay, M.A. Turner, M. Paterson, and K.H. Mills. 2003. Trophic dependence of ecosystem resistance and species compensation in experimentally acidified Lake 302S (Canada). *Ecosystems* **6**: 101-113.
709. Vinebrooke, R.D., M.A. Turner, D.L. Findlay, and M. J. Paterson. 2009. A stressor-independent test for biodiversity – ecosystem function relationships during a 23-year whole-lake experiment. *Can. J. Fish. Aquat. Sci.* **66**: 1903-1909.
710. Vinebrooke, R., M.A. Turner, K. Kidd, B.J. Hann, and D.W. Schindler. 2001. Truncated food-web effects of omnivorous minnows in a recovering acidified lake. *J. North Am. Benth. Soc.* **20**: 629-642.
711. Vitt, D.H., and S.E. Bayley. 1984. The vegetation and water chemistry of four oligotrophic basin mires of northwestern Ontario. *Can. J. Bot.* **62**: 1485-1500.
712. Wagemann, R. 1978. Some theoretical aspects of stability and solubility of inorganic arsenic in the freshwater environment. *Water Res.* **12**: 139-145.
713. Wagemann, R., M.J. Capel, R. Hesslein, and M. Stephenson. 1994. Sediment-water distribution coefficients and speciation of cadmium in a Canadian Shield lake. *Can. J. Fish. Aquat. Sci.* **51**: 1951-1958.
714. Walichnowski, A.Z., and S.G. Lawrence. 1982. Studies into the effects of cadmium and low pH upon methane production. *Hydrobiology* **92**: 559-569.
715. Watkins, E.M., D.W. Schindler, M.A. Turner, and D.L. Findlay. 2001. Effects of solar radiation on epilithic metabolism, nutrients and community composition in a clear-water boreal lake. *Can. J. Fish. Aquat. Sci.* **58**: 2059-2070.
716. Webster, K.E., P.A. Soranno, S.B. Baines, T.K. Kratz, C.J. Bowser, P.J. Dillon, P. Campbell, E.J. Fee, and R.E. Hecky. 2000. Structuring features of lake districts: landscape controls on lake chemical responses to drought. *Freshw. Biol.* **43**: 499-515.
717. Wehr, J.D., L.M. Brown, and K.A. O'Grady. 1987. Highly specialized nitrogen metabolism in a freshwater

- phytoplankter, *Chrysochromulina breviturrita*. *Can. J. Fish. Aquat. Sci.* **44**: 736-742.
718. Weider, R.K., and J.B. Yavitt. 1994. Peatlands and global climate change: Insights from comparative studies of sites situated along a latitudinal gradient. *Wetlands* **14**: 229-238.
719. Welch, H.E., J.A. Legault, and H.J. Kling. 1984. Phytoplankton, nutrients, and primary production in fertilized and natural lakes at Saqvaquac, N.W.T. *Can. J. Fish. Aquat. Sci.* **46**: 90-107.
720. Welch, H.E., and K.H. Mills. 1981. Marking fish by scarring soft fin rays. *Can. J. Fish. Aquat. Sci.* **38**: 1168-1170.
721. Welch, H.E., J.W.M. Rudd, and D.W. Schindler. 1980. Methane addition to an Arctic lake in winter. *Limnol. Oceanogr.* **25**: 100-113.
722. Whiting, G.J., and J.P. Chanton. 1992. Plant-dependent CH₄ emission in a subarctic Canadian fen. *Global Biogeochem. Cycles* **6**: 225-231.
723. Wilkinson, P. 1985. The determination of environmental levels of uranium and thorium series isotopes and ¹³⁷Cs in aquatic and terrestrial samples. *Can. Spec. Publ. Fish. Aquat. Sci.* **78**: 1-51.
724. Winfrey, M.R., and J.W.M. Rudd. 1990. Environmental factors affecting the formation of methylmercury in low pH lakes: a review. *Environ. Toxicol. Chem.* **9**: 853-869.
725. Wolfe, B., H.J. Kling, G.J. Brunskill, and P. Wilkinson. 1994. Multiple dating of a freeze core from Lake 227, an experimentally fertilized lake with varved sediments. *Can. J. Fish. Aquat. Sci.* **51**: 2274-2285.
726. Wright, R.F., and D.W. Schindler. 1995. Interaction of acid rain and global changes: Effects on terrestrial and aquatic ecosystems. *Water Air Soil Pollut.* **85**: 89-99.
727. Xenopoulos, M.A., and P.C. Frost. 2003. UV radiation, phosphorus, and their combined effects on the taxonomic composition of phytoplankton in a boreal lake. *J. Phycol.* **39**: 291-302.
728. Xenopoulos, M.A., P.C. Frost, and J.J. Elser. 2002. Joint effects of ultraviolet radiation and phosphorus supply on phytoplankton growth rate and elemental composition. *Ecology* **83**: 423-435.
729. Xenopoulos, M.A., P.R. Leavitt, and D.W. Schindler. 2009. Ecosystem-level regulation of boreal lake phytoplankton by ultraviolet radiation. *Can. J. Fish. Aquat. Sci.* **66**: 2002-2010.
730. Xenopoulos, M.A., and D.W. Schindler. 2001. The environmental control of near-surface thermoclines in boreal lakes. *Ecosystems* **4**: 699-707.
731. Xenopoulos, M.A., and D.W. Schindler. 2003. Differential responses to UVR by bacterioplankton and phytoplankton from the surface and the base of the mixed layer. *Freshw. Biol.* **48**: 108-122.
732. Xun, L., N.E.R. Campbell, and J.W.M. Rudd. 1987. Measurements of specific rates of net methyl mercury production in the water column and surface sediments of acidified and circumneutral lakes. *Can. J. Fish. Aquat. Sci.* **44**: 750-757.
733. Yoshida, T., Urabe, J., and Elser, J.J. 2003. Assessment of "top-down" and "bottom-up" forces as determinants of rotifer distribution among lakes in Ontario, Canada. *Ecological Research* **18**: 639-650.
734. Zeeb, B.A., C.E. Christie, J.P. Smol, D.L. Findlay, H.J. Kling, and H.J. Birks. 1994. Responses of diatom and chrysophyte assemblages in Lake 227 sediments to experimental eutrophication. *Can. J. Fish. Aquat. Sci.*

Sci. **51**: 2300-2311.

735. Zhang, J., J. Hudson, R. Neal, J. Sereda, T. Clair, M. Turner, D. Jeffries, P. Dillon, L. Molot, K. Somers, and R. Hesslein. 2010. Long-term patterns of dissolved organic carbon in lakes across eastern Canada: Evidence of a pronounced climate effect. *Limnol. Oceanogr.* **55**: 30-42.

REPORTS

1. Adams, C., and H. Stefan. 1997. Field data on lake ice covers: Dependence on lake characteristics and climate. *St. Anthony Falls Laboratory Project Report No. 405*, August 1997. Univ. of Minnesota.
2. Adams, C., and H. Stefan. 1997. Field data on lake ice covers: Dependence on lake characteristics and climate. Appendices A-E to Project Report No. 405. *St. Anthony Falls Laboratory External Memorandum No. 245*, August 1997. Univ. of Minnesota.
3. Anonymous. 1983. The federal calibrated watershed program, a critical assessment: the report from the workshop held in Bedford, N.S., November 17-18, 1982. LRTAP Liaison Office, Atmospheric Environment Service, Environment Canada. 23 p.
4. Anonymous. 1984. Statement to the inquiry on Federal Water Policy: Canadian Coalition on Acid Rain. Submission No. **142** to the Inquiry on Federal Water Policy [P.H. Pearse, Commission Chairman].
5. Anonymous. 1985. Ad Hoc Committee on Acid Rain: Science and Policy: Is there scientific consensus on acid rain? Excerpts from six government reports. Mary Flagler Cary Charitable Trust, Millbrook, NY. Unpublished, 13 p.
6. Anonymous. 1990. The future of the Experimental Lakes Area program. Rawson Academy Occasional Paper **4**: v+71 p.1
7. Anonymous. 1991. Department of Fisheries and Oceans, Central and Arctic Operations. *Report of the Auditor General of Canada to the House of Commons*, Chapter **13**: 305-322.
8. Anonymous. 1992. The Experimental Lakes Area: A plan for renewal. Rawson Academy of Aquatic Science. Ottawa. Volume **I**: Main Document. iv + 76 p.+ annex.
9. Anonymous. 1992. The Experimental Lakes Area: A plan for renewal. Rawson Academy of Aquatic Science. Ottawa. Volume **II**: Appendices.
10. Anonymous. 1992. Experimental Lakes Area Observatory conceptual database model report. Monenco Information Systems Inc. Ottawa. March 1992. Unpublished, 23 p.
11. Anonymous. 1992. Experimental Lakes Area consolidated database prototype design report. Monenco Information Systems Inc. Ottawa. March 1992. Unpublished, 82 p.
12. Anonymous. 1993. Experimental Lakes Area consolidated database design report. Monenco AGRA Inc.. Ottawa. April 1993. Unpublished 74 p. + 3 appendices.
13. Arnason, A.N., C.R. Krasey, and K.H. Mills. 1982. A computer program for predicting precision and tag-loss bias in Jolly-Seber mark-recapture estimates. *Can. Tech. Rep. Fish. Aquat. Sci.* **1083**: v + 42 p.
14. Beamish, R.J., L.M. Blouw, and G.A. McFarlane. 1976. A fish and chemical study of 109 lakes in the

- Experimental Lakes Area, northwestern Ontario, with appended reports on lake whitefish ageing errors and the northwestern Ontario baitfish industry. *Can. Fish. Mar. Serv. Tech. Rep.* **607**: 116 p.
15. Beaty, K.G. 1981. Hydrometeorological data for the Experimental Lakes Area, northwestern Ontario, 1969 through 1978. *Can. Data Rep. Fish. Aquat. Sci.* **285** (in three parts): vi + 317 p.
 16. Beaty, K.G. 1984. Hydrometeorological data for the Experimental Lakes Area, northwestern Ontario, 1979-1981. *Can. Data Rep. Fish. Aquat. Sci.* **480**: v + 146 p.
 17. Beaty, K.G. 1987. An irrigation system and hydrological network for a wetland acidification project. *Can. Tech. Rep. Fish. Aquat. Sci.* **1551**: iv + 32 p.
 18. Beaty, K.G., and M.E. Lyng. 1989. Hydrometeorological data for the Experimental Lakes Area, northwestern Ontario, 1982-1987. *Can. Data Rep. Fish. Aquat. Sci.* **759**: v + 280 p.
 19. Bird, G.A., W.J. Schwartz, and M. Stephenson. 1993. A safe, simple method to add radionuclides to a lake. *A.E.C.L. Technical Record TR-607* (COG-93-170): 7 p. [Atomic Energy of Canada Ltd., Whiteshell Laboratories, Pinawa, MB. R0E 1L0]
 20. Campbell, P. 1993. Comparison of two methods commonly used at the Experimental Lakes Area for collecting chemistry samples from vertically stratified lakes. *Can. Tech. Rep. Fish. Aquat. Sci.* **1881**: iv + 21 p.
 21. Campbell, P. 1993. Lake variation and climate change study: ELA lakes, 1986-1990. I. Study rationale and lake selection criteria. *Can. Tech. Rep. Fish. Aquat. Sci.* **1897**: iv + 7 p.
 22. Campbell, P., and A.G. Salki. 1992. A durable all-season marker float and mooring buoy for limnological field studies. *Can. Tech. Rep. Fish. Aquat. Sci.* **1852**: iv + 5 p.
 23. Chalanchuk, S.M. 1984. Aging a population of white suckers (*Catostomus commersoni*) by the fin-ray method. *Can. Tech. Rep. Fish. Aquat. Sci.* **1321**: iv + 16 p.
 24. Chalanchuk, S.M. 1985. Recruitment, growth and condition of a population of the white sucker, *Catostomus commersoni*, in Lake 223, an experimentally acidified lake. *Can. Tech. Rep. Fish. Aquat. Sci.* **1396**: iv + 18 p.
 25. Chalanchuk, S.M. 1986. Condition and growth of white suckers, *Catostomus commersoni* in Lake 302, a double-basin acidified lake in the Experimental Lakes Area. *Can. Tech. Rep. Fish. Aquat. Sci.* **1476**: iv + 13 p.
 26. Chalanchuk, S.M. 1997. Recruitment, growth, and condition of a population of white sucker, *Catostomus commersoni*, in Lake 223, Experimental Lakes Area, northwestern Ontario, during the recovery phase of an acidification experiment. *Can. Tech Rep. Fish. Aquat. Sci.* **2140**: iv + 27 p.
 27. Chalanchuk, S.M. 1998. Growth of white sucker, *Catostomus commersoni*, in thirty-one lakes at the Experimental Lakes Area, northwestern Ontario. *Can. Tech Rep. Fish. Aquat. Sci.* **2207**: 71 p.
 28. Chalanchuk, S.M., L.C. Mohr, and D.J. Allan. 1989. Ten years of data for four cyprinid species in Lake 114, an experimentally acidified lake in the Experimental Lakes Area, northwestern Ontario. *Can. Data Rep. Fish. Aquat. Sci.* **733**: iv + 23 p.
 29. Chalanchuk, S.M., L.C. Mohr, and D.J. Allan. 1991. Length data for four cyprinid species in Lake 302, a double-basin acidified lake in the Experimental Lakes Area, northwestern Ontario. *Can. Data Rep. Fish.*

- Aquat. Sci.* **846**: iv + 43 p.
30. Chang, P.S.S., and D.F. Malley. 1987. Zooplankton in Lake 223, Experimental Lakes Area, northwestern Ontario, 1974-1983 data. *Can. Data Rep. Fish. Aquat. Sci.* **665**: iv + 235p.
 31. Chang, P.S.S., D.F. Malley, I.L. Delbaere, and G. Mueller. 1981. Species composition and seasonal abundance of zooplankton in Lake 223, Experimental Lakes Area, northwestern Ontario: before and during acidification, 1974-1979. *Can. Data Rep. Fish. Aquat. Sci.* **290**: iv + 42 p.
 32. Chang, P.S.S., D.F. Malley, W.J. Findlay, and R.T. Barnes. 1984. Zooplankton in Lake 226, Experimental Lakes Area, northwestern Ontario, 1971-78 data. *Can. Data Rep. Fish. Aquat. Sci.* **484**: iv + 208 p.
 33. Chang, P.S.S., D.F. Malley, W.J. Findlay, and G. Mueller. 1983. Species composition and seasonal abundance of zooplankton in Lake 224, Experimental Lakes Area, northwestern Ontario, 1974-1978. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1720**: iv + 51 p.
 34. Chang, P.S.S., D.F. Malley, W.J. Findlay, G. Mueller, and R.T. Barnes. 1980. Species composition and seasonal abundance of zooplankton in Lake 227, northwestern Ontario, 1969-1978. *Can. Data Rep. Fish. Aquat. Sci.* **182**: iv + 101 p.
 35. Chang, P.S.S., D.F. Malley, and J.D. Huebner. 1988. Response of the mussel *Anodonta grandis* to acid and aluminum: Comparison of blood ions from laboratory and field [Extended abstract and resume]. In: A.J. Niimi and K.R. Solomon [eds.] Proceedings of the 14th Annual Aquatic Toxicity Workshop, November 2-4, 1987, Toronto, Ontario. *Can. Tech. Rep. Fish. Aquat. Sci.* **1607**: 157-161.
 36. Chang, P.S.S., D.F. Malley, J.F. Klaverkamp, and S.G. Lawrence. 1987. Inhibition by low pH of cadmium accumulation in the crayfish, *Orconectes virilis*, in experimental field enclosures. *Can. Tech. Rep. Fish. Aquat. Sci.* **1575**: 13 p.
 37. Chang, P.S.S., D.F. Malley, N.E. Strange, and J.F. Klaverkamp. 1981. The effects of low pH, selenium and calcium on the bioaccumulation of ²⁰³Hg by seven tissues of the crayfish, *Orconectes virilis*. *Can. Tech. Rep. Fish. Aquat. Sci.* **1151**: 45-67 p.
 38. Cooley, P.M. 1999. A manual for analysis and display of lake habitat and fish position information using GIS: physical and hydraulic habitat, drawdown, and acoustic telemetry. *Can. Tech. Rep. Fish. Aquat. Sci.* **2276**: ix + 46 p.
 39. Cruikshank, D.R. 1984. Temperature profiles for 29 lakes in the Experimental Lakes Area, northwestern Ontario, 1968-1983. *Can. Data Rep. Fish. Aquat. Sci.* **452** (in two parts): iv + 519 p.
 40. Cruikshank, D.R. 1984. The relationship of summer thermocline depth to several physical characteristics of lakes. *Can. Fish. Mar. Serv. Data Rep.* **1248**: iv + 33 p.
 41. Cruikshank, D.R. 1984. Whole lake chemical additions in the Experimental Lakes Area, 1969-1983. *Can. Fish. Mar. Serv. Data Rep.* **449**: iv + 23p.
 42. Cruikshank, D.R. 1986. Temperature profiles for 23 lakes in the Experimental Lakes Area, northwestern Ontario, 1985. *Can. Data Rep. Fish. Aquat. Sci.* **604**: iv + 180 p.
 43. Cruikshank, D.R. 1986. Whole lake chemical additions in the Experimental Lakes Area, 1984-1985. *Can. Data Rep. Fish. Aquat. Sci.* **580**: iv + 10 p.
 44. Cruikshank, D.R. 1987. Temperature profiles for 21 lakes in the Experimental Lakes Area northwestern

- Ontario, 1986. *Can. Data Rep. Fish. Aquat. Sci.* **648**: iv + 36 p.
45. Cruikshank, D.R. 1988. Effects of nutrient and acid additions on Secchi depth at the Experimental Lakes Area, 1969-1986. *Can. Tech. Rep. Fish. Aquat. Sci.* **1597**: iv + 82 p.
46. Cruikshank, D.R. 1988. Temperature profiles for 20 lakes in the Experimental Lakes Area, northwestern Ontario, 1987. *Can. Data Rep. Fish. Aquat. Sci.* **696**: iv + 31 p.
47. Cruikshank, D.R. 1991. Whole lake additions in the Experimental Lakes Area, 1986-1989. *Can. Data Rep. Fish. Aquat. Sci.* **816**: iv + 18 p.
48. Cruikshank, D.R. 1994. Temperature profiles and Secchi transparency for 23 lakes in the Experimental Lakes Area, 1988-1993. *Can. Data Rep. Fish. Aquat. Sci.* **911**: x + 157 p.
49. Cruikshank, D.R. 1994. Whole lake chemical additions in the Experimental Lakes Area, 1990-1993. *Can. Data Rep. Fish. Aquat. Sci.* **941**: iv + 19 p.
50. Cruikshank, D.R., P. Campbell, S.E.M. Kasian, E.U. Schindler, and G.K. McCullough. 1993. Lake variation and climate change study: ELA lakes, 1986-1990. III. Field observations, hydrological, light and temperature measurements. *Can. Data Rep. Fish. Aquat. Sci.* **908**:
51. Cruikshank, D.R., P. Campbell, E.U. Schindler, and S.E.M. Kasian. 1997. Lake variation and climate change study: ELA lakes, 1997-1993. Field observations, light and temperature measurements. *Can. Data Rep. Fish. Aquat. Sci.* **1024**: v + 93 p.
52. Cruikshank, D.R., K. Matthisen, and R. Hunt. 1988. Trace metal data in water from lakes and streams of the Experimental Lakes Area, northwestern Ontario, 1976-1986. *Can. Data Rep. Fish. Aquat. Sci.* **695**: v + 255 p.
53. Cruikshank, D.R., J. Penny, and S.N. Levine. 1983. Construction of large enclosures for experimental studies in lakes. *Can. Tech. Rep. Fish. Aquat. Sci.* **1210**: iv + 9 p.
54. DeBruyn, E.R., and J.A. Shearer. 1981. Phytoplankton, chlorophyll, biomass and suspended carbon in the Experimental Lakes Area - 1980 data. *Can. Data Rep. Fish. Aquat. Sci.* **260**: iv + 52 p.
55. DeBruyn, E.R., J.A. Shearer, and D.L. Findlay. 1982. Phytoplankton primary production, chlorophyll, biomass and suspended carbon in the Experimental Lakes Area - 1981 data. *Can. Data Rep. Fish. Aquat. Sci.* **336**: iv + 72 p.
56. DeBruyn, E.R., J.A. Shearer, and D.L. Findlay. 1984. Phytoplankton primary production, chlorophyll, biomass and suspended carbon in the Experimental Lakes Area - 1982 data. *Can. Data Rep. Fish. Aquat. Sci.* **438**: iv + 110 p.
57. DeClercq, D.R., and J.A. Shearer. 1976. Phytoplankton primary production in the Experimental Lakes Area using an incubator technique - 1975 data. *Can. Fish. Mar. Serv. Tech. Rep.* **647**: v + 127 p.
58. DeClercq, D.R., and J.A. Shearer. 1978. Phytoplankton primary production, chlorophyll and suspended carbon in the Experimental Lakes Area - 1977 data. *Can. Fish. Mar. Serv. Data Rep.* **74**: iv + 62 p.
59. DeClercq, D.R., and J.A. Shearer. 1979. Phytoplankton primary production, chlorophyll and suspended carbon in the Experimental Lakes Area - 1978 data. *Can. Fish. Mar. Serv. Data Rep.* **137**: iv + 69 p.

60. DeClercq, D.R., J.A. Shearer, S.L. Schiff, and E.J. Fee. 1977. Primary production, respiration, chlorophyll and suspended carbon in the Experimental Lakes Area - 1976 data. *Can. Fish. Mar. Serv. Data Rep.* **32**: v + 94 p.
61. DeClercq, D.R., and J.A. Shearer. 1980. Phytoplankton primary production, chlorophyll and suspended carbon in the Experimental Lakes Area - 1979 data. *Can. Data Rep. Fish. Aquat. Sci.* **200**: iv + 46 p.
62. Dickman, M.D., H.G. Thode, S.S. Rao, and R.F. Anderson. 1987. Sulphate reduction and microbial mediated alkalinity production in an artificially acidified lake. National Water Research Institute [Environment Canada] Contribution No. **87-142**, 26 p.
63. Duncan, D.A., and J.F. Klaverkamp. 1980. Induced tolerance to cadmium in white suckers (*Catostomus commersoni*) by exposure to sublethal concentrations of heavy metals. *Can. Tech. Rep. Fish. Aquat. Sci.* **975**: 108-109.
64. Elliott, S.E.M., C. Burns-Flett, R.H. Hesslein, G.J. Brunskill, and A. Lutz. 1981. Cesium-137, radium-226, potassium-40 and selected stable elements in fish populations from Great Slave Lake (N.W.T.), Louis Lake (Saskatchewan), Lake Winnipeg (Manitoba), and Experimental Lakes Area (northwestern Ontario). *Can. Data Rep. Fish. Aquat. Sci.* **293**: iv + 20 p.
65. Ellis, R.C., and C.R. Mattice. 1974. Stand development following pulpwood harvesting at the Experimental Lakes Area in northwestern Ontario. *Can. For. Serv., Sault Ste. Marie, ON. Inf. Rep.* **0-X-207**. 43 p., illus.
66. Emerson, S., W.S. Broecker, G.J. Brunskill, and T-H. Peng. 1970. Determination of mixing and gas exchange rates using natural and artificial introduced radon at the Experimental Lakes Area, western Ontario. *Final Report, AECL Grant AT (30-1) 2493*, Appendix 6.
67. Fairchild, W.L., D.C.G. Muir, R.S. Currie, and A.L. Yarechewski. 1990. Environmental fate and bioavailability of 2,3,7,8-tetrachlorodibenzofuran in lake mesocosms. Great Lakes Institute, U. of Windsor. 30 p.
68. Fee, E.J. 1973. A digital computer program for calculating integral primary production in vertically stratified waterbodies. *Can. Fish. Mar. Serv. Tech. Rep.* **376**: i + 14 p.
69. Fee, E.J. 1977. A computer program for estimating annual primary production in vertically stratified waterbodies with an incubator technique. *Can. Fish. Mar. Serv. Tech. Rep.* **741**: v + 38 p.
70. Fee, E.J. 1978. Studies of hypolimnion chlorophyll peaks in the Experimental Lakes Area, northwestern Ontario. *Can. Fish. Mar. Serv. Tech. Rep.* **754**: 21 p.
71. Fee, E.J. 1984. Freshwater Institute primary production model user's guide. *Can. Tech. Rep. Fish. Aquat. Sci.* **1328**: v + 36 p.
72. Fee, E.J. 1990. Computer programs for calculating *In Situ* phytoplankton photosynthesis. *Can. Tech. Rep. Fish. Aquat. Sci.* **1740**: v + 27 p. [updated version available online: <http://www.umanitoba.ca/institutes/fisheries/PSpgms.html>].
73. Fee, E.J., D. Hayward, and J.A. Shearer. 1982. Annual primary production in lakes of the Experimental Lakes Area, northwestern Ontario; 1976-1980 results. *Can. Data Rep. Fish. Aquat. Sci.* **327**: iv + 33 p.
74. Fee, E.J., R.E. Hecky, M.P. Stainton, P. Sandberg, A. Salki, G. McCullough, H.J. Kling, L. Hendzel, and S. Guildford. 1989. Lake variability and climate research in northwest Ontario: study design and 1985-1986 data from the Red Lake District. *Can. Tech. Rep. Fish. Aquat. Sci.* **1662**: v + 39 p.

75. Fee, E.J., E.U. Schindler, J.A. Shearer, E.R. DeBruyn, and D.R. DeClercq. 1991. Light attenuation in the mixed-layer of lakes in the Experimental Lakes Area, 1969-1990 data. *Can. Data Rep. Fish. Aquat. Sci.* **850**: iv + 59 p.
76. Fee, E.J., J.A. Shearer, and D.R. DeClercq. 1977. In vivo chlorophyll profiles from lakes in the Experimental Lakes Area, northwestern Ontario. *Can. Fish. Mar. Serv. Tech. Rep.* **703**: vi + 136 p.
77. Fee, E.J., J.A. Shearer, and D.R. DeClercq. 1978. In vivo chlorophyll profiles from lakes in the Experimental Lakes Area, northwestern Ontario - 1976 data. *Can. Fish. Mar. Serv. Data Rep.* **45**: iv + 104 p.
78. Findlay, D.L. 1978. Seasonal successions of phytoplankton in seven lake basins in the Experimental Lakes Area, northwestern Ontario, following artificial eutrophication: data from 1974-1976. *Can. Fish. Mar. Serv. Manuscript Rep.* **1466**: iv + 41 p.
79. Findlay, D.L. 1981. Seasonal successions of phytoplankton in seven lake basins in the Experimental Lakes Area, northwestern Ontario, following artificial eutrophication. Data from 1977 to 1979. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1627**: iv + 40 p.
80. Findlay, D.L. 1983. Seasonal successions of phytoplankton in five lake basins in the Experimental Lakes Area, northwestern Ontario, following artificial eutrophication. Data from 1980 to 1982. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1710**: iv + 30 p.
81. Findlay, D.L. 1984. Effects on phytoplankton biomass, succession and composition in Lake 223 as a result of lowering pH levels from 5.6 to 5.2. Data from 1980 to 1982. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1761**: iv + 10 p.
82. Findlay, D.L., and H.J. Kling. 1975. Seasonal successions of phytoplankton in seven lake basins in the Experimental Lakes Area, northwestern Ontario, following artificial eutrophication. *Can. Fish. Mar. Serv. Tech. Rep.* **513**: 53 p.
83. Findlay, D.L., and H.J. Kling. 1979. A species list and pictorial reference to the phytoplankton species of central and northern Canada. Parts I and II. *Can. Fish. Mar. Serv. Manuscript Rep.* **1503**: 619 p.
84. Findlay, D.L., and H.J. Kling. 2001. Protocols for monitoring biodiversity: Phytoplankton in fresh waters. *Ecological Monitoring and Assessment Network*. [Available online: <http://www.eman-rese.ca/eman/ecotools/protocols/freshwater/phytoplankton/intro.html>].
85. Findlay, D.L., and G. Saesura. 1980. Effects on phytoplankton biomass, succession and composition in Lake 223 as the result of lowering pH levels from 7.0 to 5.6. Data from 1974 to 1979. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1585**: iv + 16 p.
86. Fudge, R. J. P., Bodaly, R. A., and Strange, N. E. 1994. Lake variability and climate change study: fisheries investigations from the Northwestern Ontario Lake Size Series (NOLSS) lakes, 1987-1989. *Can. Data Rep. Fish. Aquat. Sci.* **921**: 96pp.
87. Hendzel, L.L., D.L. Findlay, E.U. Schindler, and P. Campbell. 1995. Lake variation and climate change study: ELA lakes, 1986-1990. VI. Phytoplankton photosynthesis, nutrient status and biomass enumeration data. *Can. Tech. Rep. Fish. Aquat. Sci.* **948**: iv + 56 p.
88. Hesslein, R.H. 1979. Lake acidification potential in the Alberta Oil Sands Environmental Research Program Study Area. AOSERP, Project **HY2.2**, 34 p.

89. Johannsson, O. E., Shaw, M. A., Yan, N. D., Filion, J.-M., and Malley, D. F. 1992. A comparison of freshwater zooplankton sampling gear: Nets, traps, and submersible pump. *Can. Tech. Rep. Fish. Aquat. Sci.* **1894**: 29pp.
90. Kennedy, L.A. 1980. The effects of lake acidification on embryonic development of the lake trout *Salvelinus namaycush*. *Can. Tech. Rep. Fish. Aquat. Sci.* **975**: 49-54.
91. Kling, H.J., and S.K. Holmgren. 1972. Species composition and seasonal distribution of phytoplankton in the Experimental Lakes Area, northwestern Ontario. *Can. Fish. Mar. Serv. Tech. Rep.* **337**: i + 5 p.
92. Lawrence, S.G. 1980. The effects of acid and cadmium on impounded zooplankton in a Canadian Shield lake. p. 81-90. In: Klaverkamp, J.F., S.L. Leonhard, and K.E. Marshall, [eds.], Proceedings of the Sixth Annual Workshop. *Can. Tech. Rep. Fish. Aquat. Sci.* **975**.
93. Lawrence, S.G., M. MacIver, and I.L. Delbaere. 1984. Species composition and seasonal abundance of zooplankton in Lake 114, Experimental Lakes Area, 1978-1983. *Can. Data Rep. Fish. Aquat. Sci.* **472**: iv + 49 p.
94. Linsey, G.A., and J. Braund. 1984. Water chemistry data from Lake 223 of the Experimental Lakes Area, northwestern Ontario, 1974 to 1982. *Can. Data Rep. Fish. Aquat. Sci.* **487**: iv + 121 p.
95. Linsey, G.A., J. Braund, M. Stainton, and J. Prokopowich. 1985. Water chemistry data for north and south basins of Lake 302, Experimental Lakes Area, northwestern Ontario, 1968-1983. *Can. Data Rep. Fish. Aquat. Sci.* **509**: iv + 307 p.
96. Lyng, M.E., and D.R. Cruikshank. 1985. Temperature profiles for 19 lakes in the Experimental Lakes Area, northwestern Ontario. *Can. Data Rep. Fish. Aquat. Sci.* **534**: iv + 189 p.
97. Malley, D.F., S.B. Brown, C.L. Baron, G.J. Brunskill, M.J. Capel, S.M. Chalanchuk, P.S.S. Chang, E.R. Debruyne, R.E. Evans, D.L. Findlay, S.E. Harrison, R.H. Hesslein, M.H. Holoka, D. Huebert, R.V. Hunt, J.F. Klaverkamp, S.G. Lawrence, D.A. Majewski, H.S. Majewski, K.H. Mills, R.E. McNicol, V. Palace, C.J. Ranson, E. Scherer, M. Shaw, M. Stephenson, A.R. Stewart, and L.J. Wesson. 1991. Biological effects of cadmium on a small Precambrian Shield lake: Is the Canadian Water Quality Guideline safe? Extended Abstract, in Proceedings of the 17th Annual Aquatic Toxicity Workshop, Vancouver, B.C. November 1990. *Can. Tech. Rep. Fish. Aquat. Sci.* **1774**, Vol. 1: 40-46.
98. Malley, D.F., P.S.S. Chang, C.M. Moore, and S.G. Lawrence. 1987. Changes in the aluminum content of tissues of crayfish, *Orconectes virilis*, held in the laboratory and in experimental field enclosures. *Can. Tech. Rep. Fish. Aquat. Sci.* **1480**: 54-68.
99. Malley, D.F., P.S.S. Chang, and D.W. Schindler. 1988. Decline of zooplankton populations following eutrophication of Lake 227, Experimental Lakes Area, Ontario: 1969-1974. *Can. Tech. Rep. Fish. Aquat. Sci.* **1619**: vi + 25 p.
100. Malley, D.F., W. Dentry, and S.L. Leonhard. 1979. Calcium uptake by postmoult *Daphnia magna*: a potential sublethal toxicity test. *Can. Fish. Mar. Serv. Tech. Rep.* **862**: 257-265.
101. Malley, D.F., S.G. Lawrence, M.A. MacIver, and W.J. Findlay. 1989. Range of variation in estimates of dry weight for planktonic Crustacea and Rotifera from temperate North American lakes. *Can. Tech. Rep. Fish. Aquat. Sci.* **1666**: iv + 49 p.
102. Malley, D.F., M. Shaw, M. Thibodeau, and D.B. Huebert. 1992. Relative importance of macrophyte species as cadmium sinks in a Shield lake receiving experimental additions of cadmium. Extended Abstract, in

- Niimi, A.J. and M.C. Taylor (eds). Proceedings of the Eighteenth Annual Aquatic Toxicity Workshop, September 30 - October 3, 1991, Ottawa, Ontario. *Can. Tech. Rep. Fish. Aquat. Sci.* **1863**: 86 p.
103. Malley, D.F., and L.J. Tinker. 1979. Calcium uptake: a sublethal test for crayfish, p. 150-159. In: Scherer, E., [ed.], Toxicity tests for freshwater organisms. *Can. Spec. Publ. Fish. Aquat. Sci.* **44**.
104. Marshall, J.S., D.M. Nelson, D.L. Mellinger, C. Lei, S.G. Lawrence, and D.F. Malley. 1981. Lake water chemistry and zinc toxicity to plankton communities - a preliminary report. *Argonne National Laboratory, Radiological and Environmental Research Division Annual Report ANL-80-115*, Part **III**: 64-67.
105. McCullough, G.K., and P. Campbell. 1993. Lake variation and climate change study: ELA lakes, 1986-1990. II. Watershed geography and lake morphology. *Can. Tech. Rep. Fish. Aquat. Sci.* **1898**: iv + 29 p.
106. Mellinger, D.L., J.S. Marshall, and D.F. Malley. 1980. Seasonal variations of zooplankton populations in an isolated bay and open areas of ELA 382 during 1978 and 1979. *Argonne National Laboratory, Radiological and Environmental Research Division Annual Report ANL-79-65*, Part **III**: 21-24.
107. Mellinger, D.L., J.S. Marshall, and D.F. Malley. 1981. A three-year study on the effects of enclosure on zooplankton in a large curtained bay of ELA Lake 382. *Argonne National Laboratory, Radiological and Environmental Research Division Annual Report, Ecology*, Jan.-Dec. 1980 **ANL-80-115**, Part **III**: 71-73.
108. Mills, K. H., S.M. Chalanchuk, P.J. Blanchfield, and C.L. Podemski. 2008. Enhanced growth and condition of lake trout in a small Ontario lake during cage aquaculture of rainbow trout. *Can. Tech. Rep. Fish. Aquat. Sci.* **2778**: 200-202.
109. Misra, R.F., I.J. Davies, N.H.F. Watson, and J.F. Uthe. 1995. Investigation of temporal variations in relative abundance of macroinvertebrates in Lake 224 of the Experimental Lakes Area by a multivariate method. *Can. Tech. Rep. Fish. Aquat. Sci.* **2026**: vii + 26 p.
110. Mohr, L.C. 1982. External sex determinations of lake trout (*Salvelinus namaycush*), white sucker (*Catostomus commersoni*) and lake whitefish (*Coregonus clupeaformis*) in the Experimental Lakes Area, northwestern Ontario. *Can. Tech. Rep. Fish. Aquat. Sci.* **1114**: iv + 14 p.
111. Mohr, L.C. 1984. The general ecology of the slimy sculpin (*Cottus cognatus*) in Lake 302 of the Experimental Lakes Area, northwestern Ontario. *Can. Tech. Rep. Fish. Aquat. Sci.* **1227**: iv + 16 p.
112. Mohr, L.C. 1985. Depth distribution of the slimy sculpin (*Cottus cognatus*) from Lake 302 in the Experimental Lakes Area. *Can. Tech. Rep. Fish. Aquat. Sci.* **1374**: iv + 13 p.
113. Moyer, J.N., D.R. Cruikshank, C.R. Fazakas, and C. Grose. 1997. Stream temperatures for 19 lakes in the Experimental Lakes Area, northwestern Ontario, 1970-1995. *Can. Data Rep. Fish. Aquat. Sci.* **1001**: v + 39 p.
114. Moyes, J.C. 1987. Land use change evaluation of Canadian LRTAP calibrated watersheds. Environment Canada, Inland Waters/Lands Directorate. Working Paper No. **51**, 111 p.
115. Muir, D.C.G. 1992. Proceedings of a workshop on a proposed Experimental Lakes Area whole-lake organic contaminant experiment at the Canada Centre for Inland Waters. *Can. Manuscr. Rep. Fish. Aquat. Sci.* **2140**: iv + 49 p.
116. Muir, D.C.G., W.L. Lockhart, B.N. Billeck, N.P. Grift, G.J. Brunskill, and P. Wilkinson. 1989. Estimation of atmospheric inputs of organochlorines and PAH into the northern Great Lakes from sediment profiles and fish residue data in small remote lakes. International Association for Great Lakes Research. 85 p.

117. Nero, R.W. 1982. A description of three nets suitable for estimating the abundance of *Mysis relicta*. *Can. Tech. Rep. Fish. Aquat. Sci.* **1046**: iv + 8 p.
118. Newbury, R.W., and K.G. Beaty. 1969-1974. Annual report and data summary, hydrologic studies, Experimental Lakes Area, Ontario. Unpublished.
119. Nicolson, J.A. 1977. Forested watershed studies. Summary Tech. Rep. PLUARG Task C, Activity 2 [Environment Canada, Great Lakes Centre for Forestry Research], 23 p.
120. Nicolson, J.A. 1987. Contributions of acid deposition to stream water chemistry in three Precambrian Shield basins. International Assoc. of Hydrological Sciences Publication No. **167**: 89-98.
121. Patalas, K., J. Patalas, and A. Salki. 1994. Planktonic crustaceans in lakes of Canada (distribution of species, bibliography). *Can. Tech. Rep. Fish. Aquat. Sci.* **1954**: v + 218 p.
122. Paterson, M. 2001. Protocols for Measuring Biodiversity: Zooplankton in Fresh Waters. *Ecological Monitoring and Assessment Network*. [Available online: <http://www.eman-rese.ca/eman/ecotools/protocols/freshwater/zooplankton/intro.html>]
123. Podemski, C.L., and P.J. Blanchfield. 2006. Overview of the environmental impacts of Canadian freshwater aquaculture. In A Scientific Review of the Potential Environmental Effects of Aquaculture in Aquatic Ecosystems, Volume V. *Can. Tech. Rep. Fish. Aquat. Sci.* **2450**: 30-79.
124. Prokopowich, J. 1979. Chemical characterization of epilimnion waters in the Experimental Lakes Area, northwestern Ontario. *Can. Fish. Mar. Serv. Tech. Rep.* **873**: iv + 41 p.
125. Quay, P.D., R.H. Hesslein, W.S. Broecker, and D.W. Schindler. 1978. Vertical and horizontal distribution of injections of tritiated water in experimental lakes and limnocorrals. *Can. Fish. Mar. Serv. Data Rep.* **43**: iv + 39 p.
126. Reid, R.A., D.W. Schindler, and R.V. Schmidt. 1975. Light measurements in the Experimental Lakes Area, 1969-1973. *Can. Fish. Mar. Serv. Tech. Rep.* **559**: iv + 167 p.
127. Reid, R.A., D.W. Schindler, and R.V. Schmidt. 1975. Phytoplankton production in the Experimental Lakes Area, 1969-72. *Can. Fish. Mar. Serv. Tech. Rep.* **560**: 164 p.
128. Rooney, R. C. and M.J. Paterson. 2009. Ecosystem effects of rainbow smelt (*Osmerus mordax*) invasions in inland lakes: a literature review. *Can. Tech. Rep. Fish. Aquat. Sci.* **2845**: 33pp.
129. Rosenberg, D.M., I.J. Davies, D.G. Cobb, and A.P. Wiens. 2001. Protocols for monitoring biodiversity: Benthic macroinvertebrates in fresh waters. *Ecological Monitoring and Assessment Network*. [Available online: <http://www.eman-rese.ca/eman/ecotools/protocols/freshwater/benthics/intro.html>].
130. Rosenberg, D. M. and Paterson, M. J. 2008. Cooperative research at the Experimental Lakes Area: Proceedings of a workshop between Environment Canada and Fisheries and Oceans Canada, 27-28 February, 2007, Winnipeg, Manitoba. *Can. Man. Rep. Fish. Aquat. Sci.* **2844**: 65pp.
131. Salki, A.G. 1993. Lake variation and climate change study: VII. Crustacean plankton of a lake flushing rate series in the Experimental Lakes Area, northwestern Ontario, 1987-1990. *Can Data Rep. Fish. Aquat. Sci.* **880**: v + 74 p.
132. Salki, A. 1995. Lake variation and climate change study: crustacean plankton of a lake size series in the Red

- Lake District, northwest Ontario, part 2. 1991-1993. *Can. Data Rep. Fish. Aquat. Sci.* **967**: v + 64 p.
133. Salki, A. 1995. Lake variation and climate change study: crustacean plankton of a lake flushing rate series in the Experimental Lakes Area, northwestern Ontario, 1991-1993, and lakes Nipigon and Superior, 1991. *Can. Data Rep. Fish. Aquat. Sci.* **966**: v + 34 p.
134. Sandilands, K. A., Kelly, C. A., Rudd, J. W. M., Tate, M. T., Hintelmann, H., Dimock, B., and Harris, R. 2008. Application of enriched stable mercury isotopes to the Lake 658 watershed for the METAALICUS project, at the Experimental Lakes Area, northwestern Ontario, Canada, 2001-2007. *Can. Tech. Rep. Fish. Aquat. Sci.* **2813**: 40pp.
135. Sandilands, K.A., J.W.M. Rudd, C.A. Kelly, H.H. Hintelmann, C.C. Gilmour, and M.T. Tate. 2005. Application of enriched stable mercury isotopes to the Lake 658 watershed for the METAALICUS Project, at the Experimental Lakes Area, northwestern Ontario, Canada. *Can. Tech. Rep. Fish. Aquat. Sci.* **2597**: viii + 48 p.
136. Scherer, E., and B. van der Veen. 1982. An ultrasonic beam actograph for laboratory and field use. *Can. Tech. Rep. Fish. Aquat. Sci.* **1137**: iv + 15 p.
137. Schindler, D.W., and T. Rusczyński. 1983. A test of limnological data from the Experimental Lakes Area, northwestern Ontario, for evidence of acidification. *Can. Fish. Mar. Serv. Tech. Rep.* **1147** : iv + 17 p.
138. Schindler, D.W., R. Wagemann, and R.H. Hesslein. 1977. The acidification of Lake 223, Experimental Lakes Area I. Background data, the first year of acidification (1976) and pilot experiments. *AOSERP*, Subproject **AF.2.3.1**. [Interim Report], 84 p.
139. Shaw, M.A., I.J. Davies, E.A. Hamilton, A. Kemp, R. Reid, P.M. Ryan, N. Watson, W. White, and K.M. Murphy. The DFO national LRTAP biomonitoring programme: baseline characterization, 1987-1989. *Can. Tech. Rep. Fish. Aquat. Sci.* **2032**: iv + 63 p.
140. Shaw, M.A., S. Geiling, S. Barbour, I.J. Davies, E.A. Hamilton, A. Kemp, R. Reid, P.M. Ryan, N. Watson, and W. White. 1992. The Department of Fisheries and Oceans National LRTAP Biomonitoring Programme: Site locations, physical and chemical characteristics. *Can. Tech. Rep. Fish. Aquat. Sci.* **1875**: 87 p.
141. Shearer, J.A. 1976. Construction and operation of a portable incubator for phytoplankton primary production studies. *Can. Fish. Mar. Serv. Tech. Rep.* **638**: 22 p.
142. Shearer, J.A. 1976. Light extinction measurements in the Experimental Lakes Area - 1974 data. *Can. Fish. Mar. Serv. Tech. Rep.* **615**: v + 97 p.
143. Shearer, J.A. 1976. Phytoplankton primary production in the Experimental Lakes Area using an incubator technique - 1974 data. *Can. Fish. Mar. Serv. Tech. Rep.* **616**: v + 142 p.
144. Shearer, J.A. 1978. Two devices for obtaining water samples integrated over depth. *Can. Fish. Mar. Serv. Tech. Rep.* **772**: iv + 9 p.
145. Shearer, J.A., and E.R. DeBruyn. 1981. Light attenuation in the Experimental Lakes Area - 1980 data. *Can. Data Rep. Fish. Aquat. Sci.* **259**: iv + 50 p.
146. Shearer, J.A., and E.R. DeBruyn. 1982. Light attenuation in the Experimental Lakes Area - 1981 data. *Can. Data Rep. Fish. Aquat. Sci.* **337**: iv + 51p.
147. Shearer, J.A., and E.R. DeBruyn. 1983. Light attenuation in the Experimental Lakes Area - 1982 data. *Can.*

- Data Rep. Fish. Aquat. Sci.* **411**: iv + 63 p.
148. Shearer, J.A., and E.R. DeBruyn. 1987. Light attenuation in the Experimental Lakes Area - 1983, 1984, 1985 data. *Can. Data Rep. Fish. Aquat. Sci.* **629**: iv + 149 p.
149. Shearer, J.A., E.R. DeBruyn, D.R. DeClercq, D.W. Schindler, and E.J. Fee. 1985. Manual of phytoplankton primary production methodology. *Can. Tech. Rep. Fish. Aquat. Sci.* **1341**: iv + 58p.
150. Shearer, J.A., and D.R. DeClercq. 1976. Light extinction measurements in the Experimental Lakes Area - 1975 data. *Can. Fish. Mar. Serv. Tech. Rep.* **646**: v + 113 p.
151. Shearer, J.A., and D.R. DeClercq. 1977. Light extinction measurements in the Experimental Lakes Area - 1976 data. *Can. Fish. Mar. Serv. Data Rep.* **33**: 103 p.
152. Shearer, J.A., and D.R. DeClercq. 1978. Light extinction measurements in the Experimental Lakes Area - 1977 data. *Can. Fish. Mar. Serv. Data Rep.* **73**: iv + 49 p.
153. Shearer, J.A., and D.R. DeClercq. 1979. Light extinction measurements in the Experimental Lakes Area - 1978 data. *Can. Data Rep. Fish. Aquat. Sci.* **121**: iv + 59 p.
154. Shearer, J.A., and D.R. DeClercq. 1980. Light extinction in the Experimental Lakes Area - 1979 data. *Can. Data Rep. Fish. Aquat. Sci.* **189**: iv + 63p.
155. Shearer, J.A., and E.J. Fee. 1974. Phytoplankton primary production in the Experimental Lakes Area using an incubator technique - 1973 data. *Can. Fish. Mar. Serv. Tech. Rep.* **474**: iii + 110 p.
156. Sichewski, K.B., and D.R. Cruikshank. 1998. Temperature profiles and Secchi disk transparency for 18 lakes in the Experimental Lakes Area, 1994-1996. *Can. Data Rep. Fish. Aquat. Sci.* **1032**: ix + 90 p.
157. Smith, D., and I. Davies (ed.). 1997. International co-operative program on assessment and monitoring of acidification of rivers and lakes: 8th task force meeting, 1992. *Can. Tech. Rep. Fish. Aquat. Sci.* **2155**: vi + 68 p.
158. Stainton, M.P., M.J. Capel, and F.A.J. Armstrong. 1977. The chemical analysis of fresh water. 2nd edition. *Can. Fish. Mar. Serv. Misc. Spec. Publ.* **25**: 180 p.
159. Stephenson, M., M.J. Motycka, and W.J. Schwartz. 1994. Carbon-14 activity in the water, sediments and biota of Lakes 226 North, 226 South and 224, Experimental Lakes Area, 1989 to 1994. *A.E.C.L. Technical Record TR-634* (COG-94-97): 63 p. [Atomic Energy of Canada Ltd., Whiteshell Laboratories, Pinawa, MB. R0E 1L0]
160. Stewart, A.R. 1997. Technical evaluation of molluscs as a biomonitoring tool for the Canadian mining industry. *Aquatic Effects Technical Evaluation Program Project 2.3.1*. Natural Resources Canada, Ottawa, ON.
161. Tallman, R.F., K.H. Mills, and R.G. Rotter. 1984. The comparative ecology of pearl dace (*Semotilus margarita*) and fathead minnow (*Pimephales promelas*) in Lake 114, the Experimental Lakes Area, northwestern Ontario, with an appended key to the Cyprinids of the Experimental Lakes Area. *Can. Manuscript Rep. Fish. Aquat. Sci.* **1756**: iv + 27 p.
162. Urquizo, N., J. Bastedo, T. Brydges, and H. Shear (Eds.). 2000. Ecological assessment of the Boreal Shield ecozone. Environment Canada, Indicators and Assessment Office, Ottawa. xvi + 71 p.

163. Wang, M-P., and D.R.F. Harleman. 1982. Hydrothermal-biological coupling of lake eutrophication models. Rep. **270**, Ralph M. Parsons Laboratory, Massachusetts Institute of Technology, Cambridge, MA, 384 p.
164. Weidman, R.P., D.R. Cruikshank, and C.R. Ranson. 1998. Trace metal data in water from lakes and streams of the Experimental Lakes Area, northwestern Ontario, 1987-1996. *Can. Data Rep. Fish. Aquat. Sci.* **1046**: iv + 59 p.
165. Welch, H.E., J.W.M. Rudd, and D.W. Schindler. 1979. Methane addition to an Arctic lake in winter. Can. Dep. Indian North. Affairs, *ESCOM* Rep. No. **A1-29**: vi + 33 p.

SYMPOSIA PRESENTATIONS and CONTRIBUTED CHAPTERS

1. Bayley, S.E., and D.W. Schindler. 1987. Sources of alkalinity in Precambrian Shield watershed streams under natural conditions and after fire or acidification, p. 531-548. In: Hutchinson, T.C., and M. Havas, [eds.], *Effects of atmospheric pollutants on forests, wetlands and agricultural ecosystems*. Springer-Verlag, NY.
2. Bayley, S.E., and D.W. Schindler. 1991. The role of fire in determining stream water chemistry in northern coniferous forests, p. 141-165. In: Mooney, H.A., E. Medina, D.W. Schindler, E-D. Schulze, and B.H. Walker [eds.]. *Ecosystem Experiments*. SCOPE #45. John Wiley & Sons, U.K. Also available on line: <http://www.icsu-scope.org/downloadpubs/scope45/chapter08.html>
3. Bodaly, R.A., V.L. St. Louis, M.J. Paterson, R.J.P. Fudge, B.D. Hall, D.M. Rosenberg, and J.W.M. Rudd. 1997. Bioaccumulation of mercury in the aquatic food chain in newly flooded areas. In: Sigel, A., and H. Sigel, [eds.], *Mercury and its Effects on Environment and Biology*. Vol. 34, Metal Ions in Biological Systems. Marcel Dekker, New York.
4. Bodaly, R.A., and K.A. Kidd. 2004. Mercury contamination of lake trout ecosystems, p. 147-158. In: Gunn, J.M., R.J. Steedman, and R.A. Ryder [eds.]. *Boreal Shield Watersheds: Lake Trout Ecosystems in a Changing Environment*. Lewis (CRC Press LLC), Boca Raton, FL.
5. Brown, L.M., and J.D. Wehr. 1986. Development of selenium analysis methodology at ng/l levels for soft waters subject to acidic precipitation. In: *Proceedings of the 7th Technology Transfer Conference*, p. 97-110. Ontario Ministry of Natural Resources.
6. Brunskill, G.J. 1986. Environmental features of the Mackenzie River system, p. 435-472. In: Davies, B., and K. Walker, [eds.], *The Ecology of River Systems*. W. Junk, Boston
7. Carpenter, S.R., T.M. Frost, J.H. Kitchell, T.K. Krantz, D.W. Schindler, J. Shearer, W. G. Sprules, M.J. Zimmerman. 1991. Patterns of primary production and herbivory in 25 North American lake ecosystems, p. 67-96. In: Cole, J.J., G.M. Lovett, and S.E.G. Findlay, [eds.], *Comparative Analyses of Ecosystems: Patterns, Mechanisms and Theories*. Springer-Verlag, NY.
8. Chang, P.S.S., and D.F. Malley. 1989. Partial recovery of the zooplankton community in a small Precambrian Shield lake as experimental acidification is reduced. P. 203-208. In J. Salanki, and S. Herodek [eds.], *Conservation and Management of Lakes. Symp. Biol. Hung. 38*. Akademiai Kiado, Budapest,.
9. Chang, P.S.S., and D.F. Malley. 1993. Non-reversal of acidification-caused changes in the zooplankton community of a small Precambrian Shield lake upon pH recovery. In: *Proceedings of the 5th International Conference on the Conservation and Management of Lakes*. May 17-21, 1993. Stresa, Italy.
10. Chang, P.S.S., and D.F. Malley. 1995. Effects of cadmium on zooplankton of soft, fresh waters: Testing predictions from laboratory and *in situ* mesocosms through whole-lake experimentation. In: *Proceedings of the 6th International Conference on the Conservation and Management of Lakes - Kasumigaura '95*. Vol. 2: 1091-1094.
11. Clair, T.A., J. Aherne, I.F. Dennis, M. Gilliss, S. Couture, D. McNicol, R. Weeber, P.J. Dillon, W.B. Keller, D.S. Jeffries, S. Page, K. Timoffee, and B.J. Cosby. 2006. Past and future changes to acidified eastern Canadian lakes: A geochemical modeling approach. In: *Proceedings of the 7th International Conference on Acid Deposition: Acid Rain 2005*. Prague, Czech Republic.
12. Cobb, D.G., D.M. Rosenberg, and A.P. Wiens. 1997. Responses of caddisflies to experimental flooding of a

- small peatland lake in northwestern Ontario, Canada. P. 77-82. In: R.W. Holzenthal and O.S. Flint Jr. [eds.]. *Proceedings of the 8th International Symposium on Trichoptera*. July 9-15, 1995. Minneapolis and Lake Itasca, MN, U.S.A. 496 p.
13. Cook, R.B., and C.A. Kelly. 1991. Sulfur cycling and fluxes in temperate dimictic lakes. In: Howarth, R.W., J.W.B. Stewart, and M.V. Ivanov (eds), *Sulfur Cycling on the Continents*, SCOPE **48**. John Wiley and Sons.
 14. Cook, R.B., and D.W. Schindler. 1983. The biogeochemistry of sulfur in an experimentally acidified lake. In: R. Hallberg [ed.] *Environmental biogeochemistry. Ecol. Bull.* (Stockholm) **35**: 115-127.
 15. Davies, I.J. 1984. Sampling aquatic insect emergence, p. 161-227. In: Downing, J.A., and F.H. Rigler, [eds.], *A manual on methods for the assessment of secondary productivity in freshwaters*. IBP Handbook **17**, 2nd edition. Blackwell, Oxford.
 16. Davies, I.J. 1987. Biomonitoring in Canadian freshwaters: the Department of Fisheries and Oceans programme. In: *Proceedings of the United Nations Economic Commission of Europe Workshop and Biological Monitoring*. Togliatti, USSR.
 17. Davies, I.J. 1991. Biomonitoring presnovodnykh ekosistem v Kanada: programma Departamenta Rybolovstva i Okeanov. (Canadian freshwater biomonitoring: the program of the Department of Fisheries and Oceans). In: *Problemy ekologicheskogo monitoring i modelirovaniya ekosistem. (Problems of ecological monitoring and ecosystem modelling)*. p. 75-88. Gidrometeozdat, Leningrad (St. Petersburg). [In Russian. English version issued as *Can. Trans. Fish. Aquat. Sci.* **5551** (1992), 24 p.]
 18. Dillon, P.J., D.S. Jeffries, W.A. Scheider, and N.D. Yan. 1980. Some aspects of acidification in southern Ontario, p. 212-213. In: Drablos, D., and A. Tollan, [eds.], *Ecological Impact of Acid Precipitation*. March 11-14, 1980. SNSF Project. Oslo.
 19. Elder, F.C. 1979. Overview of LRTAP aquatic effects program, p. 67-80. In: *Proceedings of a Workshop on Long Range Transport of Air Pollution and its Impact ofn the Atlantic Provinces*, Dartmouth, N.S., October 17-18, 1979.
 20. Fee, E.J. 1984. El concepto de modelo. In: Bahamonde, N., and S. Cabrera, [eds.], *Embalses - Fotosintesis y Productividad Primaria*, p. 171-173. Universidad de Chile, Santiago.
 21. Fee, E.J. 1984. Productividad primaria. In: Bahamonde, N., and S. Cabrera, [eds.], *Embalses - Fotosintesis y Productividad Primaria*. Universidad de Chile, Santiago.
 22. Fee, E.J. 1984. Ten years of studies of phytoplankton ecology in ELA lakes. In: Bahamonde, N., and S. Cabrera, [eds.], *Embalses - Fotosintesis y productividad Primaria*, p. 217. Universidad de Chile, Santiago.
 23. Flannagan, J.F., and D.G. Cobb. 1995. Emergence of Ephemeroptera from some lakes and streams in the Experimental Lakes Area (ELA), northwestern Ontario, Chapter **14**: 185-194. In: *Current Directions in Research on Ephemeroptera*.
 24. France, R.L. 1981. Response of the crayfish *Orconectes virilis* to experimental acidification of a lake with special reference to the importance of calcium, p. 98-111. In: Goldman, C.R., [ed.], *Proceedings of 5th International Symposium on Freshwater Crayfish*. Davis, CA.
 25. Havas, M. 1989. Recovery of acidified and metal-contaminated lakes in Canada, p. 187-205. In: Norton,

- S.A., S.E. Lindberg, and A.L. Page [eds.], *Acidic Precipitation: Soils, Aquatic Processes, and Lake Acidification*. Vol. 4 [Advances in Environmental Science Series]. Springer-Verlag, New York.
26. Hendrey, G.R., N.D. Yan, and K.J. Baumgartner. 1980. Responses of freshwater plants and invertebrates to acidification, p. 457-466. In: *Restoration of lakes and inland waters*. International Symposium on Inland Waters and Lake Restoration. September 8-12. EPA 440/5-81-010, Portland, ME.
 27. Hesslein, R.H. 1984. Experimental whole ecosystem studies of lake acidification at the Experimental Lakes Area. In: *Presentation Acid Rain: Impact on Florida and the Southeast*. April 27-28. Univ. Central Florida. Orlando.
 28. Hesslein, R.H. 2005. Using gas exchange estimates to determine net production of CO₂ in reservoirs and lakes. Chapter 23, p. 563-574. In: A. Tremblay, L. Varfalvy, C. Roehm, and M. Garneau [eds.], *Greenhouse Gas Emissions: Fluxes and Processes, Hydroelectric Reservoirs and Natural Environments*. 732 pp. Springer; Berlin, Heidelberg, and New York.
 29. Hesslein, R.H., M.J. Capel, and D.E. Fox. 1984. Sulfur isotope studies in natural and experimentally acidified Canadian Shield lakes. In: *Proceedings of 3rd International Symposium on Interactions between Sediments and Water*. Aug. 27-31. Geneva.
 30. Hesslein, R.H., R.A. Dwilow, K.G. Beaty, and M.E. Lyng. 2005. A comparison of carbon dioxide net production in three flooded uplands (FLUDEX, 1999-2002) and a flooded wetland (ELARP, 1991-2002) using a dynamic model. Chapter 10, p. 251-265. In: A. Tremblay, L. Varfalvy, C. Roehm, and M. Garneau [eds.], *Greenhouse Gas Emissions: Fluxes and Processes, Hydroelectric Reservoirs and Natural Environments*. 732 pp. Springer; Berlin, Heidelberg, and New York.
 31. Hesslein, R.H., and A. Herczeg. 1983. The importance of pCO₂ and organic acids in the determination of pH and alkalinity. In: *Aquatic Modeling Workshop on Acid Rain*. July 1983. U.S. Environmental Protection Agency. Raleigh, NC.
 32. Hesslein, R.H., P.D. Quay, M. Thomas, and W.S. Broecker. 1979. A whole lake gas exchange experiment using added carbon-14 and radon-222 as tracers, p. 251-254. In: *Isotopes in Lake Studies*. International Atomic Energy Agency, Vienna.
 33. Hesslein, R.H., J.W.M. Rudd, C. Kelly, P. Ramlal, and K.A. Hallard. 1991. Carbon dioxide pressure in surface waters of Canadian lakes, p. 413-431. In: Wilhelms, S.C., and J.S. Gulliver, [eds.], *Air-water mass transfer*. American Society of Civil Engineers, New York.
 34. Hesslein, R.H., D.W. Schindler, W.S. Broecker, and G. Kipphut. 1979. Fates of metal radiotracer additions in experimental enclosures in lakes and in a whole lake, p. 261-271. In: *Isotopes in Lake Studies*. International Atomic Energy Agency. Vienna.
 35. Hesslein, R.H., and E. Slavicek. 1983. Geochemical pathways and biological uptake of radium-226 in Canadian Shield lakes. In: *Proceedings of 15th Information Meeting of the Nuclear Fuel Waste Management Program*. April. AECL TR-216. Toronto, ON.
 36. Keith, J.C., and P.J. Dillon. 1989. Acidic precipitation research in Canada, p. 1-40. In: Bresser, A.H.M., and W. Salomons [eds.], *Acidic Precipitation: International Overview and Assessment*, Vol. 5 [Advances in Environmental Science Series]. Springer-Verlag, New York.
 37. Kelly, C. 1994. Biological processes that affect water chemistry. In: Steinberg, C.E.W., and R.F. Wright.

- [eds.], *Acidification of Freshwater Ecosystems: Implications for the Future*. Environmental Sciences Research Report 14. Wiley & Sons, West Sussex, England.
38. Kenny, B.C. 1972. Circulation and diffusion in a small lake. P. 237-248. In *Resource Satellites and Remote Sensing for Canada. Proceedings of the First Canadian Symposium on Remote Sensing*, Vol. 1. Ottawa.
39. Larzilliere, M., and D. Roy, P. Chretien, T. Ringuette, and L. Varfalvy. 2005. Development and use of an experimental near infrared open path diode laser prototype for continuous measurement of CO₂ and CH₄ fluxes from boreal hydro reservoirs and lakes. In: A. Tremblay, L. Varfalvy, C. Roehm, and M. Garneau [eds.], *Greenhouse Gas Emissions: Fluxes and Processes, Hydroelectric Reservoirs and Natural Environments*. 732 pp. Springer, Berlin, Heidelberg, and New York.
40. Linsey, G.A. 1994. Rawson Lake (ELA Lake 239), p.253-262. In: Allan, R.J., M. Dickman, C.B. Gray, and V. Cromie [eds.], *The Book of Canadian Lakes*. The Can. Assoc. on Water Quality, Monograph Series No. 3.
41. Malley, D.F. 1985. Acid rain and its relationship to fish biology and bald eagles, p. 114-138. In: Gerrard, J.M., and T.N. Ingram [eds.], *The Bald Eagle in Canada*. White Horse Plains Publishers, Headingley, MB.
42. Malley, D.F. 1993. Response of the population of crayfish *Orconectes virilis* in a Precambrian Shield lake to stress from cadmium at levels near the Canadian Water Quality Guideline. In: *Proceedings of the 9th International Conference on Heavy Metals in the Environment. 12-16 September 1993*. Vol. 1: 389-392. Toronto, Ontario.
43. Malley, D.F., and P.S.S. Chang. 1980. Response of zooplankton in Precambrian Shield lakes to whole-lake chemical modifications causing pH change, p. 108-114. In: *Restoration of lakes and inland waters*. International Symposium on Inland Waters and Lake Restoration. September 8-12. EPA 440/5-81-010, Portland, ME.
44. Malley, D.F., D.L. Findlay, and P.S.S. Chang. 1982. Ecological effects of acid precipitation on zooplankton, p. 297-327. In: D'Itri, F.M., [ed.], *Acid precipitation: effects on ecological systems*. Ann Arbor Science Publishers, Ann Arbor, MI.
45. Malley, D.F., B.W. Hauser, P.C. Williams, and J. Hall. 1996. Prediction of organic carbon, nitrogen and phosphorus in freshwater sediments using near infrared reflectance spectroscopy, p. 691-699. In: Davies, M.C., and P. Williams [eds.], *Near Infrared Spectroscopy: The Future Waves*. NIR Publications, Chichester, U.K.
46. Matthews, C.J.D., J.J. Venkiteswaren, V.L. St. Louis, and S.L. Schiff. 2005. The use of carbon mass budgets and stable carbon isotopes to examine processes affecting CO₂ and CH₄ production in the experimental FLUDEX reservoirs, Chapter 15, p. 355-382. In: Tremblay, A., L. Varfalvy, C. Roehm, and M. Garneau [eds.], *Greenhouse Gas Emissions: Fluxes and Processes, Hydroelectric Reservoirs and Natural Environments*, Springer, Berlin, Heidelberg, and New York.
47. McCullough, G.K. 1998. The contribution of forest litterfall to phosphorus inputs into lake 239, Experimental Lakes Area, northwestern Ontario, p. 159-168. In: Brewin, M.K., and D.M.A. Monita [tech. Coord.], *Land Management Practices Affecting Aquatic Ecosystems*. Proc. Forest-Fish Conf., May 1-4, 1996, Calgary, AB. Can. For. Serv. North For. Cent. Inf. Rep. NOR-X-356.
48. Mills, K. 1983. Experimental acidification of Lake 223, Experimental Lakes Area: responses of fish populations, 1976-1982. In: *Proceedings of the 36th Meeting of the Canadian Conference for Fisheries Research*, Winnipeg, Jan. 3-4, 1983. P. 54.
49. Mills, K.H. 1984. Fish population responses to artificial acidification of a small Ontario lake, p. 117-131. In:

- Hendrey, G.R., [ed.], *Early biotic responses to advancing lake acidification*. Butterworth Publishers, Boston.
50. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2004. A long-term study of the dynamics of lake trout populations in small lakes, p. 53-54. In: L. McKee and S. Thompson, *Symposium on the Ecology, Habitat and Management of Lake Trout in North America*.
 51. Mills, K.H., S.M. Chalanchuk, and D.J. Allan. 2004. Lake trout spawning locations and spawning site fidelity in small Ontario lakes. In: L. McKee and S. Thompson, *Symposium on the Ecology, Habitat and Management of Lake Trout in North America*. Appendices 1 and 6.
 52. Mills, K.H., S.M. Chalanchuk, D.J. Allan, K.L. Howland, K.L., and R.F. Tallman. 2004. The fin-ray method of aging lake trout.
 53. Mills, K.H., E.C. Gyselman, S.M. Chalanchuk, and D.J. Allan. 2005. The population dynamics of unexploited lake whitefish (*Coregonus clupeaformis*) populations, p. 247-259. In: L.C. Mohr and T.F. Nalepa, *Proceedings of a Workshop on the Dynamics of Lake Whitefish (Coregonus clupeaformis) and the Amphipod Diporeia spp. in the Great Lakes*. Great Lakes Fishery Commission Tech. Rep. **66**.
 54. Muir, D.C.G., and N.P. Grift. 1995. Fate of herbicides and organochlorine insecticides in lake waters, p 141-156. In: Ragsdale, N.N., P.C. Kearney, and J.R. Plimmer (eds), *Eighth International Congress of Pesticide Chemistry: Options 2000*. American Chemical Society.
 55. Newbury, R.W., and K.G. Beaty. 1977. Water budgets in small Precambrian lake basins in northwestern Ontario, Canada, p. 132-139. In: *Preprint Volume 2nd Conference on Hydrometeorology. October 25-27. American Meteorological Society*, Boston, Mass.
 56. Newbury, R.W., K.G. Beaty, G.K. McCullough, and J.A. Dalton. 1979. A preliminary comparison of runoff relationships and water budgets in three small experimental lake basins in the continental, subarctic and arctic climatic regions of the Precambrian Shield, p. 517-535. In: *Cold Climate Hydrology, proc. of the Canadian hydrology symposium (#CHS. 79)*. May 7-11. NRC, Vancouver, BC.
 57. Nicolson, J.A. 1975. Water quality and clear cutting in a boreal forest ecosystem, p. 734-738. In: *Proceedings of Canadian Hydrology Symposium-75*. NRCC No. **15195**. Aug. 11-14. Winnipeg, MB.
 58. Quay, P.D., W.S. Broecker, R.H. Hesslein, E.J. Fee, and D.W. Schindler. 1979. Whole lake tritium spikes to measure horizontal and vertical mixing rates, p. 175-193. In: *Isotopes in Lake Studies*. International Atomic Energy Commission, Vienna.
 59. Rubec, C.D., and G.M. Wickware. 1978. Automated land classification in the boreal zone using LANDSAT digital data, p. 127-135. In: *Proceedings of the 5th Symposium on Remote Sensing*, Victoria, B.C., August 28-31, 1978.
 60. Schindler, D.W. 1972. Production of phytoplankton and zooplankton in Canadian Shield Lakes, p. 311-331. In: Kajak, Z., and A. Hillbrich-Ilkowska, [eds.], *Productivity problems of freshwaters*. Proceedings of IBP-UNESCO Symposium, Kazimierz-Dolny. May 1970. Warszawa.
 61. Schindler, D.W. 1973. Experimental environments. Nutrients in a lake, p. 175-182. In: Calder, N., [ed.], *Nature in the round: a guide to environmental science*. Weidenfeld and Nicholson Ltd., London.
 62. Schindler, D.W. 1974. Eutrophication, p. 255-267. In: *Allocative conflicts in water resource management*. Agassiz Center for Water Studies, Univ. Manitoba, Winnipeg, MB.
 63. Schindler, D.W. 1976. Biogeochemical evolution of phosphorus limitation in nutrient-enriched lakes of the

- Precambrian Shield, p. 647-663. In: Nriagu, J., [ed.], *Environmental biogeochemistry. Volume 2. Metals transfer and ecological mass balance*. Ann Arbor Science Publ., Ann Arbor, MI.
64. Schindler, D.W. 1978. Chemical budgets and watershed acidification, p. 4. In: Ch. IV. *Report of International Workshop on Limnological Aspects of Acid Precipitation*. Sept. 25-28. Sagamore Lake, NY.
65. Schindler, D.W. 1978. Eutrophication: Can it be controlled or cured in Manitoba? p. 41-53. In: *Manitoba Water Quality Objectives: How far do we go?* Proceedings of a public forum, 5 - 6 May, 1977, Winnipeg, MB. Manitoba Environmental Council, Study **10**, May 1978, v + 140 p.
66. Schindler, D.W. 1979. Effects of acid deposition on Canadian lakes and fisheries, p. 61-63. In: *Proceedings of the Action Seminar on Acid Precipitation*. Toronto, Ontario. Nov. 1-3, 1979. Organizing Committee, Federation of Ontario Naturalists, Don Mills, ON.
67. Schindler, D.W. 1980. Chemical budgets and watershed acidification, p. 13-14. In: Hendrey, G.R., [ed.], *Limnological aspects of acid precipitation*. BNL **51074** UCII, Environmental Control Technology and Earth Sciences. Brookhaven National Laboratory, Upton, NY.
68. Schindler, D.W. 1980. Ecological effects of experimental whole-lake acidification, p. 453-462. In: Shriner, D.S., C.R. Richmond, and S. Lindberg, [eds.], *Atmospheric sulfur deposition: environmental impact and health effects*. Ann Arbor Science Publishers, Ann Arbor, MI.
69. Schindler, D.W. 1980. Experimental acidification of a whole lake: a test of the oligotrophication hypothesis, p. 370-374. In: Drablos, D., and A. Tollan, [eds.], *Ecological Impact of Acid Precipitation*. March 11-14, 1980. SNSF Project. Oslo.
70. Schindler, D.W. 1980. Implications of regional-scale lake acidification, p. 533-538. In: Shriner, D.S., C.R. Richmond, and S. Lindberg, [eds.], *Atmospheric sulfur deposition: environmental impact and health effects*. Ann Arbor Science Publishers, Ann Arbor, MI.
71. Schindler, D.W. 1981. Experimental manipulation of whole lakes, p. 269-283. In: *Acidification in the Canadian Aquatic Environment*. NRCC No. 18475. Ottawa.
72. Schindler, D.W. 1981. Interrelationships between the cycles of elements in freshwater ecosystems, p. 113-124. In: Likens, G.E., [ed.], *Some Perspectives of the Major Biogeochemical Cycles*. SCOPE **17**. John Wiley and Sons, NY.
73. Schindler, D.W. 1981. Review of phosphorus management strategies for lakes. In: Loehr, R.C., et al., [eds.], Booktitle unknown. Ann Arbor Science, Ann Arbor, MI.
74. Schindler, D.W. 1981. Studies of eutrophication in lakes and their relevance to the estuarine environment, p. 71-82. In: Nielson, B.J., and L.E. Cronin, [eds.], *Estuaries and Nutrients*. Humana Press, Clifton, NJ.
75. Schindler, D.W. 1982. Experimental, whole ecosystem studies of lake acidification, p. 74-91. In: *Acid rain reappraised*. In: *Proceedings of a Public Conference*. April 26, 1983. John Carroll University, University Heights, OH.
76. Schindler, D.W. 1985. The coupling of elemental cycles by organisms: evidence from whole lake chemical perturbations, p. 225-250. In: Stumm, W., [ed.], *Chemical processes in lakes*. John Wiley and Sons, NY.
77. Schindler, D.W. 1986. Recovery of Canadian lakes from acidification, p. 11-22. In: Barth, H., [ed.], *Proceedings of Workshop on Reversibility of Acidification*. June 9-11, 1986. Grimstad, Norway.

78. Schindler, D.W. 1991. Whole lake experiments at the Experimental Lakes Area, p. 121-139. In: Mooney, H.A., E. Medina, D.W. Schindler, E-D. Schulze, and B.H. Walker [eds.]. *Ecosystem Experiments*. SCOPE #45. John Wiley & Sons, U.K. Also available on line: <http://www.icsu-scope.org/downloadpubs/scope45/chapter07.html>
79. Schindler, D.W. 1994. Changes caused by acidification to the biodiversity, productivity and biogeochemical cycles of lakes. In: Steinberg, C.E.W., and R.F. Wright. [eds.], *Acidification of Freshwater Ecosystems: Implications for the Future*. Environmental Sciences Research Report 14. Wiley & Sons, West Sussex, England.
80. Schindler, D.W. 1995. Linking species and communities to ecosystem management: A perspective from the Experimental Lakes experience, p. 313-325. In: Jones, C.G., and J.H. Lawton (eds), *Linking Species and Ecosystems*. Chapman and Hall, New York.
81. Schindler, D.W., and S.E. Bayley. 1990. Freshwaters in cycle, p. 149-167. In: Mungall, C. and J.J. McLaren [ed.], *Planet Under Stress: The challenge of global change*. Royal Society of Canada. Oxford University Press, Toronto.
82. Schindler, D.W., and E.J. Fee. 1974. Primary production in freshwater, p. 155-158. In: *Proceedings of First International Congress of Ecology, Structure, Functioning and Management of Ecosystems*. September 8-14. Wageningen. Centre for Agricultural Publication and Documentation. W. Junk, The Hague.
83. Schindler, D.W., and E.J. Fee. 1975. The roles of nutrient cycling and radiant energy in aquatic communities, p. 323-343. In: Cooper, J.P., [ed.], *Photosynthesis and productivity in different environments*. Cambridge Univ. Press.
84. Schindler, D.W., T.M. Frost, K.H. Mills, P.S.S. Chang, I.J. Davies, D.L. Findlay, D.F. Malley, J.A. Shearer, M.A. Turner, P.J. Garrison, C.J. Watras, K. Webster, J.M. Gunn, P.L. Brezonik, and W.A. Swenson. 1991. Comparisons between experimentally- and atmospherically-acidified lakes during stress and recovery, p. 193-226. In: Last, F.T. and R. Watling, [eds.], *Acidic Deposition: Its Nature and Impacts*. Proceedings of the International Symposium held in Glasgow, Scotland, 16-21 September 1990. Proceedings of the Royal Society of Edinburgh, Section B, Vol. 97. Edinburgh, Scotland.
85. Schindler, D.W., and J.M. Gunn. 2004. Dissolved organic carbon as a controlling variable in lake trout, p. 133-145. In: Gunn, J.M., R.J. Steedman, and R.A. Ryder [eds.]. *Boreal Shield Watersheds: Lake Trout Ecosystems in a Changing Environment*. Lewis (CRC Press LLC), Boca Raton, FL.
86. Schindler, D.W., R.H. Hecky, and K.H. Mills. 1993. Two decades of whole lake eutrophication and acidification experiments, p. 294-304. In L. Rasmussen, T. Brydges, and P. Mathy (eds.). *Experimental Manipulations of Biota and Biogeochemical Cycling in Ecosystems*. Report No. 4, *Ecosystems Research Report Series*, Commission of the European Communities. No. EUR 14914 EN, Brussels.
87. Schindler, D.W., R.H. Hesslein, and G. Kipphut. 1977. Interactions between sediments and overlying waters in an experimentally-eutrophied Precambrian Shield Lake, p. 235-243. In: Golterman, H.L., [ed.], *Interactions between sediments and freshwater*. Sept. 1976. W. Junk, The Hague, PUDOC, Wageningen.
88. Schindler, D.W., D.R.S. Lean, and E.J. Fee. 1975. Nutrient cycling in freshwater ecosystems, p. 96-105. In: Reichle, D.R., [ed.], *Productivity of world ecosystems*. U.S. National Academy of Sciences, Washington, DC.
89. Schindler, D.W., J. Moore, and R.A. Vollenweider. 1974. Liquid scintillation techniques, p. 76-80. In: Vollenweider, R.A., [ed.], *A manual on methods for measuring primary production in aquatic environments*. Blackwell Scientific Publications, Oxford.

90. Shearer, J.A., E.J. Fee, K.G. Beaty, and E.U. Schindler. 1997. The relationship of primary production to climate in Boreal Shield lakes of northwestern Ontario, 1973 through 1996. Plenary Presentation at the 3rd National EMAN Meeting, Saskatoon, SK, Canada, 22 January 1997, [Online]. Available: http://www.cciw.ca/eman-temp/reports/publications/nm97_prim/intro.html [June 1997].
91. Stephenson, M., M.F. Motycka, and M.J. Laverock. 1995. Recycling of Cd from sediment to water in an experimentally contaminated lake. Extended Abstract. In: *Proceedings of the 10th International Conference on Heavy Metals in the Environment*. Hamburg, Germany, 19-22 September, 1995.
92. Sterner, R.W. 1995. Elemental stoichiometry of species in ecosystems. In: C.G. Jones and J.H. Lawton [eds.], *linking Species and Ecosystems*, Chapman and Hall, New York.
93. Sterner, R.W., J.J. Elser, T.H. Chrzanowski, J.H. Schampel, and N.B. George. 1996. Biogeochemistry and trophic ecology: a new food web diagram. Pages 72-80. In: G.A. Polis, and K.O. Winemiller [eds.], *Food Webs: Integration of Patterns and Dynamics*, Chapman and Hall, New York.
94. Thompson, B.M., and R.D. Hamilton. 1974. Some problems with heterotrophic uptake methodology, p. 566-576. In: Colwell, R.R., and R.Y. Morita, [eds.], *Effect of the ocean environment on microbial activities*. Univ. Park Press, Baltimore, London, Tokyo.
95. Turner, M.A., D.W. Schindler, and R.W. Graham. 1983. Photosynthesis - irradiance relationships of epilithic algae measured in the laboratory and in situ, p. 73-87. In: Wetzel, R.G., [ed.], *Periphyton of freshwater ecosystems*. Dr. W. Junk, The Hague.
96. Wahlgren, M.A., and K.A. Orlandini. 1981. Comparison of the geochemical behavior of plutonium, thorium and uranium in selected North American lakes. In: *International Symposium on Migration in the Terrestrial Environment of Long-Lived Radionuclides from the Nuclear Fuel Cycle*. July 27-31, 1981. Knoxville, TN.
97. Walichnowski, A.Z., and S.G. Lawrence. 1982. Studies into the effects of cadmium and low pH upon methane production, p. 559-569. In: Sly, P.G., [ed.], *Developments in Hydrobiology* Vol. 9; also published as *Hydrobiologia* Vol. 91/92. Sediment/freshwater interaction. Proceedings of the Second International Symposium. Kingston, ON. June 15-18, 1981. W. Junk, The Hague.
98. Walker, P., and M. Stephenson. 1989. The fate and impact of cadmium on a stream ecosystem. In: [volume title unknown], J.P. Vernet [ed.], p. 495-499. CEP Consultants Ltd.
99. Wanninkhof, R., J. Ledwell, and J. Crusius. 1991. Gas transfer velocities on lakes measured with sulfur hexafluoride, p. 441-458. In: Wilhelms, S.C., and J.S. Gulliver (ed), *Air-Water Mass Transfer*. American Society of Civil Engineers, New York.
100. Wiener, J.G., Bodaly, R.A., Brown, S.S., Lucotte, M., Newman, M.C., Porcella, D.B., Reash, R.J., and Swain, E.B. 2007. Evaluating and monitoring trends in methylmercury accumulation in aquatic biota. In *Ecosystem Responses to Mercury Contamination*. Edited by R.C.Harris, D.Krabbenhof, R.Mason, M.W.Murray, R.Reash, and T.Saltman. *CRC Press, Webster, NY* pp. 87-122.
101. Wright, R.F. 1991. Acidification: Whole-catchment manipulations, Chapt. 7. In: Mooney, H.A., E. Medina, D.W. Schindler, E-D. Schulze, and B.H. Walker [eds.]. *Ecosystem Experiments*. SCOPE #45. John Wiley & Sons, U.K. Also available on line: <http://www.icsu-scope.org/downloadpubs/scope45/chapter09.html>
102. Xenopoulos, M.A., and D.W. Schindler. 2001. Physical factors determining ultraviolet radiation flux into ecosystems, p. 36-62. In: Cockell, C.S., and A.R. Blaustein [ed.], *Ecosystems, Evolution and Ultraviolet Radiation*, Springer-Verlag, New York.

THESES

1. Allis, R.G. 1975. Geothermal measurements in five small lakes of northwestern Ontario, Canada. *M.Sc. thesis*, Univ. Toronto, Toronto, ON, 109p.
2. Amaral, J.A. 1992. Sulfate reduction and organic sulfur formation in lake sediments. *Ph.D. thesis*, Univ. of Manitoba, Winnipeg, MB, xvi + 255 p + A9.
3. Awang, G.M. 1984. Studies into the effects of low pH on the methanogenic fermentation in anaerobic freshwater sediments. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 106 p.
4. Baulch, H. 2002. Effects of increased temperature on epilithon and the implications of climatic change. *M.Sc. thesis*, Univ. of Alberta, Edmonton, AB, 141 p.
5. Behr, R.S. 1986. Sulfur dynamics in an acidified mire in northwestern Ontario. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xiii + 119 p.
6. Bhardwaj, A. 1997. Seasonal variability of net carbon dioxide exchange in a headwater bog, Kenora, Ontario. *M.Sc. thesis*, McGill Univ., Montreal, QC.
7. Bottomley, D.J. 1974. Sources of streamflow and dissolved constituents in a small Precambrian Shield watershed. *M.Sc. thesis*, Univ. Waterloo, Waterloo, ON, 188 p.
8. Bower, P. 1981. Addition of radiocarbon to the mixed-layers of two small lakes: Primary production, gas exchange, sedimentation, and carbon budget. *Ph.D. thesis*, Columbia Univ., New York, NY, 238 p.
9. Boychuk, R.J. 1994. Hepatic mixed-function oxidase enzymes in white suckers (*Catostomas commersoni*) over a seasonal cycle and following injection with PCB congener 77. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, vii + 110 p.
10. Boudreau, N.M. 2000. Sources of CH₄, CO₂, and DOC in newly flooded boreal upland reservoirs: a δ¹³C inventory of sources and processes. *M.Sc. thesis*, Univ. of Waterloo, Waterloo, ON, xiii + 180 p + appendices.
11. Campbell, P. 1976. Descriptive limnology of Lake 120, a meromictic lake on the Precambrian Shield in northwestern Ontario. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 118 p.
12. Chan, Y.-K. 1977. Denitrification and phytoplankton assimilation of nitrate in Lake 227 during summer stratification. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 188 p.
13. Clasen, J.L. Viral ecology of lakes: A descriptive and ecological study of viruses that infect phytoplankton. University of British Columbia, Oceanography.
14. Cook, R.B. 1981. The biogeochemistry of sulfur in two small lakes. *Ph.D. thesis*, Columbia Univ., New York, NY, 248 p.
15. Cooley, P.M. 1997. Mapping the nearshore substrates and hydrodynamics in lakes. *M.A. (Geography) thesis*, Univ. Manitoba, Winnipeg, MB.
16. Crusius, J. 1992. Evaluating the mobility of ¹³⁷Cs, ²³⁹⁺²⁴⁰Pu and ²¹⁰Pb from their distributions in laminated sediments. *Ph.D. thesis*, Columbia University, New York, NY, 263 p.
17. Currie, R.S. 1993. Bioavailability of sediment-associated contaminants to aquatic invertebrates in littoral mesocosms. *M.Sc. thesis*. Univ. Manitoba, Winnipeg, MB.

18. Curtis, J.P. 1991. Biogeochemistry of iron in small Precambrian Shield lakes at the Experimental Lakes Area, northwestern Ontario. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xiii + 263 p.
19. Davidson, G.A. 1984. Paleolimnological reconstruction of the acidification history of Lake 223 (ELA). *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xii + 186 p.
20. Davies, J.M. 1997. An investigation and evaluation of photosynthetic and respiratory measurements as determined from pCO₂ changes of incubated culture and lake water samples. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 179 p.
21. Delorme, P.D. 1995. The effects of toxaphene, chlordane and 2,3,4,7,8-pentachlorodibenzofuran on lake trout and white sucker in an ecosystem and the distribution and effects of 2,3,4,7,8-pentachlorodibenzofuran on white suckers and broodstock rainbow trout in laboratory experiments. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xvi + 241 p.
22. Donahue, W.F. 2000. The direct and indirect effects of solar ultraviolet radiation in boreal lakes of the Experimental Lakes Area, northwestern Ontario. *Ph.D. thesis*, Univ. Alberta, Edmonton, AB, 177 p.
23. Duggarila, B. Analyzing sustainable energy opportunities for a small scale off-grid facility: a case study at Experimental Lakes Area (ELA), Ontario. University of Manitoba, Winnipeg, MB.
24. Duncan, D.A. 1982. Development of acclimation-induced tolerance and resistance to acute cadmium toxicity in white sucker (*Catostomus commersoni*). *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, viii + 95p.
25. Dwilow, A.G. 1977. Uptake of ammonium and nitrate by phytoplankton in lakes of the Experimental Lakes Area, northwestern Ontario. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, vii + 97 p.
26. Dyck, B.S. 1998. The species composition, aboveground biomass and carbon content of vegetation in two basin bogs in the Experimental Lakes Area, north-western Ontario. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 178 p.
27. Eddy, J.B. 2000. Estimation of the abundance, biomass, and growth of a northwestern Ontario population of finescale dace (*Phoxinus neogaeus*), with comments on the sustainability of local commercial baitfish harvests. *M.N.R.M. thesis*, Univ. Manitoba, Winnipeg, MB, v + 85 p. + appendices.
28. Eloranta, R.D. 1978. The effect of acidification upon the bacterial flora of experimental enclosures in a soft water lake. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 75 p.
29. Emerson, S. 1974. Radium-226 and radon-222 as limnologic tracers: The carbon dioxide gas exchange rate. *Ph.D. thesis*, Columbia Univ., New York, NY, 183 p.
30. Flett, R.J. 1973. Measurement of nitrogen fixation rates by acetylene reduction and estimation of seasonal inputs of biologically fixed nitrogen to several artificially fertilized lakes in the Experimental Lakes Area of northwestern Ontario. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, viii + 102 p.
31. Flett, R.J. 1977. Nitrogen fixation in Canadian Precambrian Shield lakes. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 197 p.
32. France, R.L. 1983. Life history response of the crayfish *Orconectes virilis* (Hagen) to acidification in the Experimental Lakes Area, northwestern Ontario: a laboratory and field study. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xvi + 306 p.

33. Fowle, B.A. 1994. The hydrology of a Precambrian Shield peatland: controls on methylmercury formation and the flux. *M.Sc. thesis*, York Univ., Toronto, ON, ix + 84 p.
34. Frazer, L.V. 2009. Paleolimnological reconstruction of cladoceran community reassembly following experimental manipulation of two boreal shield lakes. *M.Sc. thesis*, University of Manitoba, Winnipeg, MB.
35. Frost, P.C. 2001. Ecological stoichiometry of trophic interactions in the benthos of boreal lakes. *Ph.D. Thesis*, Arizona State University, Tempe, AZ, 147 p.
36. George, N.B. 1994. Nutrient stoichiometry of piscivore-planktivore interactions in two whole-lake experiments. *M.Sc. thesis*, Univ. of Texas-Arlington., Arlington, TX.
37. Gerrard, P.M. 2000. The effects of experimental reservoir creation on the bioaccumulation of methylmercury and reproductive success of tree swallows (*Tachycineta bicolor*). *M.Sc. Thesis*, Univ. Alberta, Edmonton, AB.
38. Godard, D.R. Pathological examination of fish exposed to explosive based instantaneous pressure change. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB.
39. Graham, B.W. 1978. Comparison of nitrogen fixation rate estimation by nitrogen 15 uptake and acetylene reduction methods in freshwater blue-green algae. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 198 p.
40. Graham, M.D. and Vinebrooke, R.D. 2011. Extreme weather events alter plankton communities in boreal lakes. *Limnology and Oceanography* **54**: 2481-2492.
41. Grapentine, L.C. 1987. Consequences of environmental acidification to the freshwater amphipod *Hyaella azteca*. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, x + 173 p.
42. Graydon, J.A. 2003. Mechanisms of mercury deposition under boreal forest canopies: contributions of new and recycled inputs. *M.Sc. thesis*, Univ. Alberta, Edmonton, AB, 99 p.
43. Hall, B. 1996. Bioaccumulation of methylmercury by aquatic insects and fish at the Experimental Lakes Area. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, ix + 66 p.
44. Hall, B.D. 2003. Impacts of reservoir creation on the biogeochemical cycling of methylmercury in Boreal forest uplands. *Ph.D. thesis*, Univ. Alberta, Edmonton, AB, 231 p.
45. Hesslein, R.H. 1976. The fluxes of CH₄, total CO₂ and NH₃-N from the sediments and their consequent distribution in small lakes. *Ph.D. thesis*, Columbia Univ., New York, NY, 186 p.
46. Hrenchuk, L. 2010. Accumulation of dietary and waterborne mercury by fish - experimental and whole-ecosystem approaches using enriched stable isotopes. University of Manitoba, Winnipeg, MB.
47. Heyes, A. 1996. Methylmercury in natural and disturbed wetland. *Ph.D. thesis*, McGill Univ., Montreal, QC.
48. Howell, E.T. 1988. Ecology of periphyton associations with isoetid plants in low alkalinity lakes. *Ph.D. thesis*, Univ. Toronto, Toronto, ON, 231 p.
49. Jeremiason, J.D. 1997. The effects of variable trophic conditions on air-water exchange, cycling, and burial of organic contaminants in lakes. *Ph.D. thesis*, Univ. Minnesota, Minneapolis, MN, 319 p.
50. Jeziorski, A. Crustacean zooplankton sedimentary assemblages and the calcium concentration of softwater Ontario lakes. *Ph.D. thesis*, Queens University.

51. Johnson, M.W. 2001. Indicators (parasites and stable isotopes) of trophic status of yellow perch (*Perca flavescens Mitchell*) in nutrient poor Canadian Shield lakes. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xvii, 388 leaves : ill., maps.
52. Joyce, E.M. 2001. The impact of experimental reservoir creation on greenhouse gas fluxes from forested uplands. *M.Sc. thesis*, Univ. Alberta, Edmonton, AB, 70 p.
53. Kennedy, K.G. 1974. The hydrology and hydrochemistry of a small Precambrian Shield watershed. *M.Sc. thesis*, Univ. Waterloo, Waterloo, ON, xviii + 248 p.
54. Kipphut, G.W. 1978. An investigation of sedimentary processes on lakes. *Ph.D. thesis*, Columbia Univ., New York, NY, 180 p.
55. Kullman, M. Assimilation of freshwater salmonid aquaculture waste by native aquatic biota. *M.Sc. thesis*, University of New Brunswick-St. John, Saint John, NB. 153 p.
56. Kyle, Marcia. 1994. Stoichiometry of carbon, nitrogen and phosphorus in *Pseudomonas fluorescens*. *M.Sc. thesis*, Univ. Texas-Arlington, Arlington, TX.
57. Lalonde, J.D. 2003. Les réactions d'oxydoréduction du Hg dans l'eau de surface et la neige. *Ph.D. thesis*, INRS-ETE, Université du Québec, Québec, QC, xix + 176 p.
58. Lamontagne, S. 1998. Nitrogen cycling in the upland Boreal Shield forest: Response to an experimental addition of nitrate. *Ph.D. thesis*, Univ. Waterloo, Waterloo, ON, xvi + 183 p.
59. Levine, S.N. 1975. A preliminary investigation of orthophosphate concentration and the uptake of orthophosphate by seston in two Canadian Shield lakes. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 151 p.
60. Levine, S.N. 1983. Natural mechanisms that ameliorate nitrogen shortages in lakes. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xiv + 354 p.
61. Loewen, N.R. 1984. Evaluation of the acetylene inhibition technique for estimating denitrification in freshwater epilimnetic sediments using nitrogen-15. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, vii + 117 p.
62. MacKay, N.A. 1996. Ecological stoichiometry of zooplankton-phytoplankton interactions. *Ph.D. dissertation*, Arizona State Univ., Tempe, AZ.
63. Mageau, M.T. 1992. The effects of turbulence and carbon concentration on competition between *Microcystis aeruginosa* and *Scenedesmus bijugatus*. *M.Sc. thesis*, Univ. Minnesota – Duluth, ii + 39 p + append.
64. Mailman, M. 2003. Effects of burning before flooding on methyl mercury and greenhouse gas concentrations. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 173 p.
65. Mailman, M. Assessment of mercury and selenium interactions in freshwater. *Ph.D. thesis*. University of Manitoba, Winnipeg, MB. 198 p.
66. Matthews, C.J.D. 2002. Greenhouse gas production in experimental reservoirs flooding upland boreal forest. *M.Sc. thesis*, Univ. Alberta, Edmonton, AB, 101 p.
67. Mewhinney, E. 1996. The importance of hydrology to carbon dynamics in a small boreal forest wetland. *M.Sc. thesis*, Univ. Waterloo, Waterloo, ON.
68. Mills, K.H. 1981. The responses of a lake whitefish (*Coregonus clupeaformis*) to a whole lake fertilization.

- Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xiii + 209 p.
69. Miskimmin, B.M. 1989. The influence of dissolved organic carbon on methyl mercury production and sediment-water partitioning in precambrian shield lakes. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, vi + 104 p.
70. Mitchell, C.P.J. 2002. Hydrogeomorphic controls on reduction – oxidation conditions across boreal upland – wetland interfaces. *M.Sc. thesis*, Univ. Toronto, Toronto, ON.
71. Moffett, M. 1991. Responses of subepilimnetic primary producers to experimental lake acidification. *Ph.D. dissertation*, Univ. Kansas, Lawrence, KS, 252 p.
72. Mowat, L.D., St. Louis, V.L., Graydon, J.A., and Lehnerr, I. 2011. Influence of Forest Canopies on the Deposition of Methylmercury to Boreal Ecosystem Watersheds. *Environmental Science & Technology* **45**: 5178-5185.
73. Murphy, K.-A. 1995. Microbial Ecology of a freshwater fish kill. *M.Sc. thesis*, Univ. of Western Ontario, London, ON, 124 p.
74. Musgrave, D.L. 1984. Penetrative convection in sediments. *Ph.D. thesis*, Univ. of Alaska, Fairbanks, AK, 125 p.
75. Nero, R.W. 1981. The decline of *Mysis relicta* Loven in response to experimental acidification of a whole lake. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xii + 173 p.
76. Orihel, D.M. 2005. The effects of changes in atmospheric mercury deposition on the bioaccumulation of mercury by fish. *M.N.R.M. thesis*, Univ. Manitoba, xv + 190 p.: ill.
77. Palace, V.P. 1992. Superoxide dimutase, catalase and glutathione peroxidase antioxidant enzyme activities as indicators of lipid peroxidative stress in freshwater fish. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, i + 135 p.
78. Page, B.C. 2005. A comparative study of mercury speciation and the vertical movement of newly added mercury across the mercury methylation layer in three contrasting wetlands. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, x + 96 leaves : ill.
79. Park, B.J. 2003. Effects of the environmental estrogen 17aethynylestradiol on early development of green frogs (*Rana clamitans*) and mink frogs (*R. septentrionalis*) at the Experimental Lakes Area (Ontario, Canada). *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xii + 130 p.
80. Patterson, K. 2010. The fate of farmed rainbow trout (*Oncorhynchus mykiss*) released from commercial aquaculture operations in Lake Huron. University of Manitoba, Winnipeg.
81. Peech Cherewyk, K.A. 2002. Methylmercury bioaccumulation in zooplankton: an assessment of exposure routes and accumulation in newly flooded reservoirs. *M.Sc. thesis*. Univ. Manitoba, Winnipeg, MB, 89 p.
82. Playle, R.C. 1985. The effects of aluminum on aquatic organisms: 1) alum additions to a small lake, and 2) aluminum-26 tracer experiments with minnows. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, ix + 176 p.
83. Plumb, J.M. 2006. Climate-mediated changes in habitat use by lake trout (*Salvelinus namaycush*). *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xvii + 206 p.
84. Poschadel, C. 1997. Floating peat island formation at an experimentally flooded wetland: impacts on methane

- and carbon dioxide production and flux rates to the atmosphere. *M.Sc. thesis*, Univ. Waterloo, Waterloo, ON.
85. Poulain, Alexandre J. 2002. Réduction biologique et photochimique du mercure dans un lac du bouclier canadien. *M.Sc. thesis*, INRS, Université du Québec, Québec, QC.
86. Quay, P.D. 1977. An experimental study of turbulent diffusion in lakes. *Ph.D. thesis*, Columbia Univ., New York, NY, 198 p.
87. Rabasco, R.M. 2000. Trophic effects of macrophyte removal on fish populations in a boreal lake. *M.N.R.M thesis*. Univ. Manitoba, Winnipeg, MB, viii + 113 p.
88. Ramlal, P.S. 1983. Measurement of biological mercury methylation in the littoral sediments of an acidified and unacidified lake. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 116 p.
89. Ramsey, D.J. 1985. The responses of planktonic crustacean communities in large enclosures to experimental acidification. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xvii + 203 p.
90. Ray, M.A. 1997. The role of bacteria in a freshwater fish kill of an experimentally acidified lake. *M.Sc thesis*, Univ. Western Ontario, London, ON, 119 p.
91. Reinke, D.C. 1980. The effects of cadmium on freshwater phytoplankton communities: a comparative algal assay study. *Ph.D. thesis*. Univ. Kansas, Lawrence, KS, vi + 223 p.
92. Richards, Shirley R. 1992. Organic volatile sulfur compounds in inland aquatic systems. *Ph. D. thesis*, Univ. Manitoba, Winnipeg, MB, xiii + 228 p.
93. Rooney, N.M. 1995. Phytoplankton community change in an experimentally acidified lake. *M.Sc. thesis*, Univ. Western Ontario, London, ON, 98 p.
94. Rooney, R. 2006. The influence of a rainbow trout (*Oncorhynchus mykiss*) cage farm on the benthic environment and invertebrate fauna of Lake 375, Experimental Lakes Area. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, ix + 170 p.
95. Rudd, J.W.M. 1976. Methane cycling in Lake 227 and its effects on whole lake metabolism. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, 128 p.
96. Sarica, José. 2004. Les transferts du mercure bioaccumulé dans les carcasses de poisson vers les organismes aquatiques et vers les invertébrés terrestres nécrophages. *Ph.D. thesis*, INRS, Université du Québec, Québec, QC.
97. St. Louis, V.L. 1992. The effects of experimental lake acidification on the reproductive success of tree swallows. *Ph.D. thesis*, Univ. Toronto, Toronto, ON, xiv + 115 p.
98. Samek, M. 1997. The community structure of heterotrophic and autotrophic bacteria and microflagellates in four lakes of the Precambrian Shield and the possible roles of bacteria in mercury dynamics in freshwater systems. *M.Sc. thesis*, Univ. Manitoba, 142 p.
99. Schiff, S.L. 1986. Acid neutralization in sediments of freshwater lakes. *Ph.D. thesis*, Columbia Univ., New York, NY, xvii + 334 p.
100. Scott, K.J. 2003. Development and use of mer-lux bioreporter for the measurement and characterization of bioavailable Hg(II) in defined media and aquatic environmental samples. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xv + 152 p.

101. Seckar, D. 2009. Interactions between *Chaoborus* spp. and *Mysis relicta* and their impact on pelagic crustacean zooplankton in mesocosms at the Experimental Lakes Area. M.Sc. thesis. University of Manitoba, Winnipeg, MB. 104 p.
102. Segstro, M.D. 1991. The bioavailability of polychlorinated dibenzo-b-dioxins to mussels and crayfish in aquatic ecosystems. *M. Sc. thesis*, Univ. Manitoba, Winnipeg, MB, x + 97 p.
103. Sellers, P. 1997. Sediment flux and photodegradation of methylmercury in two boreal drainage lakes. *Ph.D. thesis*, Univ. Manitoba. Winnipeg, MB, xiii + 210 p.
104. Sellers, T.J. 1995. Distribution of lake trout, *Salvelinas namaycush*, and opossum shrimp, *Mysis relicta*, in small boreal lakes with respect to temperature, dissolved oxygen, and light. *M.Sc. thesis*, Univ. of Alberta, Edmonton, AB.
105. Servos, M.R. 1988. Fate and bioavailability of polychlorinated dibenzo-p-dioxins in aquatic environments. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xv + 181 p.
106. Sharma, S. 1997. Fluxes of dimethyl sulfide from lakes of the Canadian Boreal Shield. *M.Sc. thesis*, York Univ., Toronto, ON.
107. Stewart, A.R. 1988. Effect of a metal mixture (Cu, Zn, Pb, and Ni) on the bioavailability and bioaccumulation of cadmium in natural systems. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xix + 184 p.
108. Sweerts, J-P.R.A. 1990. Oxygen consumption, mineralization and nitrogen cycling at the sediment-water interface of north-temperate lakes. *Ph.D. thesis*, Rijksuniversiteit Groningen (Netherlands), 136 p.
109. Tam, T.-Y. 1985. Effect of acid precipitation on heterotrophic nitrification in Canadian Precambrian Shield lakes. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xix+363 p.
110. Thompson, B.M. 1972. Heterotrophic utilization of sucrose in an artificially enriched lake. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, 92 p.
111. Torgersen, T. 1977. Limnologic studies using the tritium-helium-3 tracer pair: a survey evaluation of the method. *Ph.D. thesis*, Columbia Univ., New York, NY, xx + 217 p.
112. Turner, M.A. 1981. Haptobenthic photosynthesis. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xii + 116 p.
113. Turner, M.A. 1993. The ecological effects of experimental acidification upon littoral algal associations of lakes in the boreal forest. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, xvi + 194 p.
114. Urban, N.R. 1987. The nature and origins of acidity in bogs. *Ph.D thesis*, Univ. of Minnesota, Minneapolis.
115. Van Wallegem, J.L.A. 2006. The elimination of mercury by fish in the wild. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 192 p.
116. Vascotto, G.L. 1976. Zoobenthic assemblages of four central Canadian lakes and their potential use as environmental indicators. *Ph.D. thesis*, Univ. Manitoba, Winnipeg, MB, 196 p.
117. Venkiteswaran, J.J. 2002. A process-based stable isotope approach to carbon cycling in recently flooded upland boreal forest reservoirs. *M.Sc. thesis*, Univ. Waterloo, Waterloo, ON, 109 p.
118. Venkiteswaran, J.J. 2008. Greenhouse gas cycling in experimental boreal reservoirs. Ph. D. thesis. University

of Waterloo, Waterloo, ON. 275

119. Walichnowski, A.Z. 1982. Studies into the effects of cadmium and low pH upon methane production. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, ix + 183 p.
120. Watkins, E.M. 2000. Effects of solar ultraviolet radiation on epilithic metabolism, pigment and community composition in a clear-water, boreal lake. *M.Sc. thesis*, Univ. Alberta, Edmonton. ABm xii + 65 p.
121. Webster, K.E. 1999. Responses of lakes to drought: geomorphic and landscape controls. *Ph.D. dissertation*. Univ. of Wisconsin - Madison.
122. Weidman, R. P. 2000. Distribution of ultraviolet light effects on epilithon within the littoral zone of an oligotrophic boreal forest lake. *B.Sc. thesis*, Univ. Manitoba, Winnipeg, MB.
123. Wiens, Allen P. 1972. Bionomics of the pitcher plant midge *Metriocnemus knabi* (Coquillett)(Dipter: Chironomidae). *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, xi + 100 p.
124. Winder, M. and J.E. Cloern. 2010. The annual cycles of phytoplankton biomass. *Philosophical Transactions of the Royal Society B: Biological Sciences* **365**: 3215-3226.
125. Xenopoulos, M.A. 2002. The effects of solar radiation and water column mixing on the phytoplankton of boreal lakes. *Ph.D. thesis*, Univ. of Alberta, Edmonton, AB, 186 p.
126. Xun, L. 1984. The effect of acid stress on methylation and demethylation of mercury in the whole-lake ecosystem. *M.Sc. thesis*, Univ. Manitoba, Winnipeg, MB, ix + 122 p.

BOOKS

1. Brunskill, G.J., et al. 1983. *Radioactivity in the Canadian environment*. National Research Council of Canada, **NRCC 19250**: 292 p.
2. Edmondson, W.T. 1991. *The Uses of Ecology: Lake Washington and Beyond*. Univ. of Washington Press, Seattle, WA. 329 p.
3. Freedman, W. 1989. *Environmental Ecology: The Impacts of Pollution and Other Stresses on Ecosystem Structure and Function*. Academic Press, x + 424 p.
4. Forstner, U., and G.T.W. Wittmann. 1983. *Metal Pollution in the Aquatic Environment* [2nd ed.]. Springer-Verlag, xviii + 486 p.
5. Gunn, J.M., R.J. Steedman, and R.A. Ryder. 2004. *Boreal Shield Watersheds: Lake Trout Ecosystems in a Changing Environment*. Lewis (CRC Press LLC), Boca Raton, FL. xxiv + 501 p.
6. Mooney, H.A., E. Medina, D.W. Schindler, E-D. Schulze, and B.H. Walker [eds.]. 1991. *Ecosystem Experiments*. SCOPE #45. John Wiley & Sons, U.K., 296 p.
7. Schindler, D.W., et al. 1981. *Atmosphere-biosphere Interactions: Toward a Better Understanding of the Ecological Consequences of Fossil Fuel Combustion*. National Academy Press, Wash., DC, National Academy of Sciences. 163p., **FWI675i**.
8. Vallentyne, J.R. 1974. *Algal Bowl: Lakes and Man*. Env. Can. Fish. and Mar. Serv. Misc. Spec. Pub. **22**: 186

p.

MAGAZINE ARTICLES, NEWSLETTERS, AND OTHER

1. Anonymous. 1982. Experimental Lakes Area. Communications Branch, Fisheries and Oceans, Freshwater Institute, Winnipeg [FM-W-82-003]. 8 p.
2. Anonymous. 1984. Update acid rain. *Outdoor Canada* **12(5)**: 28-32.
3. Anonymous. 1985. Acid Rain. Fisheries and Oceans, Freshwater Institute, Winnipeg [Fs 23-53/1985E]. 8 p.
4. Anonymous. 1988. ELA acid rain research: In the vanguard of freshwater science. *Pisces*, November 1988, p. 1-3. (Canada Fisheries and Oceans)
5. Anonymous. 1988. DFO's David Schindler a 'super scientist'. *Pisces*, November 1988, p. 3. (Canada Fisheries and Oceans)
6. Anonymous. 1991. Warme macht die Seen krank. *Geo*, Nr. 7, Montag, 24.6.1991. p.155-156.
7. Anonymous. 1993. Fisheries research valuable to sport fishermen. *The Outdoor Edge*, Spring: 64-65.
8. Anonymous. 1994. The Experimental Lakes Area: Protecting the health of our lakes. *Kenora Daily Miner and News*, special insert, May 11, 1994. 4 p.
9. Anonymous. 1994. Ecological Research and monitoring at the ELA. *Ecological Science Centres News* **1(3)**: 1-2. (Environment Canada)
10. Anonymous. 2001. Experimental Lakes Area: Protecting the Health of Canada's Lakes (3rd edition). Fisheries and Oceans Canada, Freshwater Institute, Winnipeg, MB. 11 p. (also available on line at www.dfo-mpo.gc.ca/regions/CENTRAL/pub/ela-rle/ela-rle_e.htm).
11. Anonymous. 2001. La Région des lacs expérimentaux: Pour protéger les lacs du Canada. Pêches et Océans Canada, L'institut des eaux douces, Winnipeg, MB. 11 p. (aussi à www.dfo-mpo.gc.ca/regions/central/pub/ela-rle/ela-rle_f.htm).
12. Anonymous. 1995. Multidisciplinary Teams in Limnology. *The Freshwater Imperative: A Research Agenda*. Naiman, R.J., J.J. Magnuson, D.M. McKnight, and J.A. Stanford [Ed.]. Island Press, Washington, D.C. p. 18-19.
13. Baltessen, B. 2004. LOWDPOA members visit the Experimental Lakes Area. *Lake of the Woods Area News* **34(3)**: 44-46. (May/June 2004).
14. Fellman, Bruce. 1990. Chemistry in collision. *American Way*, Feb. 15, 1990: 52-56.
15. Fellman, Bruce. 1990. Sacrificial lakes. *International Wildlife*, July-August, 1990.
16. Gordon, David George. 1996. Double trouble: scientists say the combination of acid rain and global warming may be endangering lake life. *Current Science* **82(1)**: 12-13 [6 September 1996].
17. Gorrie, P. 1992. Lakes as laboratories. *Can. Geogr.* **112(2)**: 69-78.

18. Hurley, B. 1996. Northern lakes lose their sunscreen. *Earth* **5(4)**: 14. (August)
19. Kidd, K. 2003. Hormones and hormone mimics in the aquatic environment. *Eco-Journal (Manitoba)* **13(1)**: 6-7.
20. Kives, B. 2008. Fish highly susceptible to airborne mercury. *Winnipeg Free Press*, August 8, 2008.
21. Kives, B. 2008. Clear Thinking. *Winnipeg Free Press*, August 18, 2008.
22. MacDonald, J. 2002. Testing the waters. *Seasons* **42(3)**: 29-32.
23. Madussi, S. 2009. Experimental Lakes Area: 40 years of aquaculture. *The Dryden Observer* 14 Oct. 2009
24. Maloney, T. 1995. Scientists speak out against shuffle. *Eco-Journal (Manitoba)*, July-August 1995, p. 1 & 4.
25. Maloney, T. 1995. Freshwater science: Discarded by indifferent bureaucracy. *Canadian Dimension* **29(6)**: 21-23.
26. McArthur, D. 2008. Lakes provide real lab for aquatic research. *The Cottager* **17(2)**: 43-45
27. Nikiforuk, A. 1992. Wetland man. *Imperial Oil Rev.* **76(407)**: 18-21.
28. Nikiforuk, A. 1999. Thank God this man is smiling. *Outdoor Canada* **27(8)**: 28-33, 62-64.
29. Nikiforuk, A. 2001. The Indiana Jones of Ecology. *Nature Canada* **30(2)**: 36-38.
30. Pelley, J. 2003. Estrogen knocks out fish in whole-lake experiment. *Environ. Sci. Technol.* **37(17)**: 313A-314A.
31. Peniuk, M. 2004. LOWDPOA tour of the ELA - Thursday, July 15, 2004. *Lake of the Woods Area News* **34(5)**: 9-10.
32. Pinsker, L.M. 2003. In search of the mercury solution. *Geotimes* **48(8)**: 16-21 (August)
33. Renner, R. 1996. Canadian ecological research area faces major funding cuts. *Environ. Sci. Technol.* **30(7)**: 283A.
34. Renner, R. 2001. Follow the mercury. *Environ. Sci. Technol.* **35**: 229A-230A.
35. Renner, R. 2002. Newly deposited mercury may be more bioavailable. *Environ. Sci. Technol.* **36(11)**: 226A-227A.
36. Renner, R. 2006. Linking atmospheric mercury to fish advisories. *Environ. Sci. Technol. Online News*. 23 August 2006. http://pubs.acs.org/subscribe/journals/esthag-w/2006/aug/science/rr_fishadvisories.html
37. Riley, M. 2006. The Experimental Lakes Area. *Lake of the Woods Area News* **36(5)**: 10.
38. Robson, B. 1992. The little lakes that could. *Nature Canada* **21(2)**: 22-27.
39. Robson, B. 1996. Freshwater Institute in hot water. *Nature Canada* **25(4)**: 6, 8.
40. Schick, N. 2000. Mercury's pathways to fish. *EPRI Journal*, Winter 2000: 8-17.

41. Song, V. 2008. Canada's water supply drying up? Part 1. Explaining the myth of water abundance in Canada *Ottawa Sun*. June 29, 2008.
42. Vallentyne, J.R. 1995. Cut really amputation. *Lake of the Woods District Area News* **25(4)**: 10-11. [reprinted from the Winnipeg Free Press].